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नाहं वसामि वैकुण्ठे न योगिहृदये रवौ ।
मद्भक्ता यत्र गायन्ति तत्र तिष्ठामि नारद ॥

"I dwell not in Vaikuntha, nor in the hearts of Yogins, nor in the Sun; (but) where my Bhaktas sing, there be I, Narada!"

EDITED
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THE XLth MADRAS MUSIC CONFERENCE
1966

OFFICIAL REPORT

The Opening Day

18th December, 1966

The XLth Conference and Music Festival of the Madras Music Academy were held in the Academy's premises, 115-E, Mowbrays Road, Royapettah, Madras-14 from 18th December 1966 to 1st January 1967.

Vidvan Palghat Sri T. S. Mani Iyer presided over the Conference and His Excellency Sardar Ujjal Singh, Governor of Madras opened the Conference. There was a large audience and the Academy's Auditorium was filled with musicians and music scholars from all over India and also from foreign countries, besides Members of the Academy and special invitees.

Opening Function

On arrival at the premises of the Academy, the Governor Sardar Ujjal Singh and Sardarini Ujjal Singh were received by the office-bearers of the Academy. He was introduced to the President of the Conference, other musicians and Members of the Executive and Expert Committees of the Academy. After a group photo, the Governor was led to the Auditorium.

The proceedings began with prayer by the students of the Teachers' College of the Music Academy.

Messages

Sri R. Ranganathan, Secretary, then read the messages received for the success of the Conference.

Dr. S. Radhakrishnan, President of India sent his best wishes for the success of the Conference. He said, "The President is glad to know that the 40th Annual Conference of the Madras Music Academy will be held from the 18th December 1966. He sends his best wishes for its success."

Dr. Zakir Hussain, Vice-President of India, said in his message :

"I am glad to know that the 40th Annual Conference of the Madras Music Academy will be held from the 18th of December. I send my best wishes for the success of the Conference."

His Highness, Maharaja Jaya Chamaraja Wadiar wrote: "I am extremely happy to know that the 40th Conference of the Music Academy will be held from the 18th December 1966 to the 1st of January 1967 and Sardar Ujjal Singh, Governor of Madras will be opening the Conference. I wish the Madras Music Academy all success."

Their Excellencies Sri Biswanath Das, Governor of U. P., Sri Nityananda Kanungo, Governor of Gujarat, and Sri V. V. Giri, Governor of Mysore, sent messages.

Sri Nityanand Kanungo, Governor of Gujarat, said in the course of his message:

"My congratulations to Music Academy on its excellent activities and all good wishes for success of its Fortieth Conference."

Sri V. V. Giri, Governor of Mysore, said in his message:

"I am glad that the 40th Annual Conferenee of the Madras Music Academy is being celebrated on the 18th. I know the excellent work which your Academy is rendering and during December it provides many treats to the people of Madras. In fact, people from other parts of South also come to Madras all the way to hear and enjoy the music. I am sure in the coming years your Academy will grow from strength to strength. I send my best wishes for the success of your Annual Conference."

The Hon'ble Sri M. Bhaktavatsalam, Chief Minister of Madras, writes:—

"The Music Academy has, since its inception, functioned as the repository of the best music and dance traditions of Tamil Nad. No wonder the annual music festival of the Academy is being looked forward to by all lovers of music and dance in the City of Madras. I have no doubt that the 40th Annual Conference of the Music Academy will help preserve and foster our rich heritage."

The following Ministers at the Centre sent messages:

Sri O. V. Alagesan, Sri C. R. Pattabhiraman, Sri D. Sanjeeviah, Sri K. L. Rao, the Deputy Minister for Iron and Steel, and the Deputy Minister for Health.

Hon'ble Sri S. Nijalingappa, Chief Minister of Mysore, and Sri B. V. Jatti and Sri M. V. Rama Rao, Ministers of Mysore, and Sri M. R. Appa Rao and Sri M. N. Lakshminarasiah, Ministers of Andhra Pradesh, sent their good wishes.

The Hon'ble Sri R. Venkataraman, Minister of Industries, Madras, who inaugurated the previous year's Conference said in his message: "The Music Academy has a long and continuous record of service in preserving the purity and tradition of Karnatic Music. Vidvan Sri Palghat Mani Iyer, the most outstanding percussion instrumentalist, has made original and distinguished contribution by the mastery of his technique and it is but fitting that the Governor should inaugurate this Session."

Sri N. S. S. Manradiar, Minister for Co-operation, Madras, referred to the unfailing annual budget for classical music and dance with which the Music Academy has established for itself a position of preeminence in the field of Fine Arts and wishes all success to this year's Conference.

The Hon'ble Sri S. Chella Pandian conveyed his good wishes to the Academy.

Sri S. N. Mozumdar, Vice-Chairman, Central Sangeet Nataka Akademi, said in his message: "The very fact that this will be the 40th session speaks volumes. I do not know of any other Conference related to the three arts which has met year after year, served its purpose and served so successfully. The two features of your Conference have special connotation—the revealing of young talent and the other to identify the affinities between the Karnatic and the Hindustani Music."

Dr. V. K. Narayana Menon, Director-General, All-India Radio, referred to the high standards which the Academy had already set for itself and wished that the Institution would keep up those standards.

Prof. M. S. Thacker of the Planning Commission sent his best wishes.

Sri C. V. Narasimhan, Chief of the Cabinet of U.N., New York, said in his message that in honouring Mani Iyer the Music Academy was honouring a person who was not only a musical genius in the true sense of the word but also a person of deep humility. He was pleased that the 40th Conference would be presided by this outstanding artist who had brought credit to the music tradition in India and abroad.

Mrs. Henry Cowell, wife of the composer who had founded a prize for Mridangam in the Academy, sent her heartiest greetings and admiration to the Academy and her respectful salutations to the Governor of Madras who was opening the Conference. She referred to her late husband's interest in Mridangam and the appropriateness of South India's foremost Mridangam Vidvan presiding over this session and sent him her respectful greetings.

Prof. Willard Rhodes of the Music Department of Columbia University who participated in the previous year's Conference and was attached to the Academy in his further studies on Indian Music, said in his message that his experience of the 39th Conference had been a memorable one and had added a new dimension to his understanding and appreciation of the music of India.

The Society for Asian Music, New York, sent the following message: "The work of the Music Academy and its publication in the Journal constitute a major and significant contribution to our knowledge of the great musical art of India. The Society congratulates the Academy upon its distinguished record and looks forward to its continuing work."

Dr. Johanna Spector, Ethno-musicologist, NewYork, who was scheduled to participate in this year's Conference said in her message: "I do not know how close India and especially South India is to my heart. I have to be again exposed to its music day and night."

Dr. Harold Powers who had studied Karnatic Music in Madras, sent from the University of Pennsylvania his message wishing well of the Conference and congratulations to the Academy and President of this session.

Prof. Barbara Smith of the Music Department of the University of Hawaii sent her best wishes and Hawaiian *aloha*.

The International Institute of Comparative Music Studies, Berlin, sent its best wishes and said: "In its forty years of existence the Music Academy, Madras, stood as one of the foremost Institutions in India for the preservation and encouragement of classical music and dance. Our Institute which works along with the International Music Council of the Unesco, considers the Music Academy as one of the foremost Institutions in the world working in this field with the highest standards of scholarship and artistic achievements. They send their best wishes and deep admiration."

The German Democratic Republic represented by its Consul in Madras sent its best wishes.

Messrs. C. V. C. T. V. Venkatachallam Chettiar, Mr. K.S.G. Haja Sheriff, M.L.A., Sri K. Gopalakrishnan of Standard Motors, the Secretary of the Madras State Sangita Nataka Sangam, Vidvan Veenai Narayana Iyengar, Vidvan Balasubramaniam of Rajahmundry, The Tyagaraja Gana Sabha, Eluru, Vidvan Aripirala Satyanarayanamurthi of Vijayavada, and Prof. Maheswar Neog of Gauhati University sent their messages of goodwill for the success of the 40th Conference.

Sangita Kalanidhi Sri Chittoor Subramania Pillai referred to the service that the Music Academy has done in the 40 years of its existence in spreading the cause of music widely and abroad in distant countries, and wishes the Conference and the Academy all success.

Sangita Kalanidhi Sri T. L. Venkatarama Iyer, President of the Academy, welcomed the gathering. In doing so, he mentioned especially the efforts taken by the Academy during the years to make the Carnatic and Hindustani systems of music better known and appreciated mutually.

Welcome Address:

Dr. V. Raghavan, Secretary, then read the Welcome Address to His Excellency the Governor. He said

"Your Excellency,

We are grateful that you, the Head of the State, have kindly consented to inaugurate the 40th Conference and the connected

Festival of Music and Dance of the Music Academy, Madras, which is the foremost institution in this field in this part of the country. In inviting you, the Academy as an institution which cherishes the value of tradition, has followed the *sampradaya* of associating the successive Governors of the State with its most important annual event, the Conference. We extend to you, Your Excellency, a hearty welcome to our Academy.

"As one who has been in the thick of public life and has been connected with various progressive activities and developments in the country since the beginning of the National Movement, you will be interested to know that the Music Academy, Madras, was born out of the Madras session of the Indian National Congress held in 1927. During the last four decades, we have stabilised ourselves and developed our activities in the teaching of music, in research and publication, in the preservation of the twin arts of music and dance in their authentic classical forms and in promoting their performance and enjoyment according to proper standards. Our Conference lasting for a fortnight is looked forward to by musicians and musicologists not only from all parts of South India, but also from North India and countries outside. We have been in no small measure responsible for bringing nearer the two systems of music, the Karnatic and the Hindustani, and for the increasing interest in Indian music in Europe and America as part of the larger East-West dialogue which has been growing in recent years. The results of the discussions in our Experts' Committee meetings are embodied in our Journal which has a world-wide circulation. We have also a number of publications on the technical foundations of our music and editions of rare old songs in notation. We may mention particularly our latest work, a thesaurus of the Ragas of the North and the South which forms an outstanding contribution to the mutual understanding of the two sister schools of Indian music.

"The election as President of the Conference of the Music Academy, which you are to inaugurate, Sir, is held as the highest honour in the career of the Karnatic musician. Duriug the session, we give nearly sixty performances in which, together with the proceedings of the Experts' Committee, nearly three hundred and fifty musicians figure. These include not only the outstanding

performers in the different branches of the art, but many who are on the way to reaching the front ranks, and a still larger number of younger aspirants for whom, in addition to providing a very large listening public who are admitted free, we have also special prizes for the best performers among them. Many of the promising artists of this younger group are those who have been successively adjudged best in the large number of competitions in the different departments of music held as part of the annual session and in which competitors from distant parts of the country participate.

"In the Teachers' College of Music, the Academy is giving training to candidates to qualify themselves as music teachers in Secondary Schools and in this field our College is a unique Institution enjoying the recognition and assistance of the Government of Madras, as well as from the Centre.

"This new and magnificent Hall, the like of which you perhaps do not see in other parts of the country, is itself an evidence of the great enthusiasm for the art in this part of the country, as well as of the co-operation of a large circle of friends but for whose willing help and generosity this could not have been achieved. Indeed we attach the highest value to this art, which, as our great composers have again and again stressed in their songs, is a *Sadhana* in our religious pursuit and spiritual evolution. The message of our *Kirtanas* is the same as that of the songs of Nanak and other Gurus with which you are familiar. It is this message of the saints and the mystic singers embodying the highest truths of our philosophy, the teaching of our scripture and the experience and realisation of our *Acharyas* and *Mahatmas* that has sustained the continuity, unity and vitality of our culture. It is this core-truth that is also the basis of our dedication to this art and to this Institution which stands for it.

"May we now request Your Excellency to declare open our Fortieth Conference and the Music Festival.

We remain, Your Excellency,
Your Friends and Admirers of
THE MUSIC ACADEMY, MADRAS."

Opening Address

The Governor H. E. Sri Ujjal Singh then rose to deliver his opening address. He said in the course of his address:

Friends,

It gives me great pleasure to accept the invitation of the Music Academy to inaugurate its Fortieth Conference to-day.

I am struck by the fact that this well-established institution devoted to the cause of Music, traces its birth to the resolution passed by the All-India Music Conference which was included in the session of the Indian National Congress held in Madras in 1927. I congratulate all those connected with this Academy on their efforts and enthusiasm to build up its reputation through these decades.

I am glad to know that this Academy pays particular attention to higher learning and practice of Music and that these annual Conferences bring together leading artistes and experts. The Academy has reason to feel proud that the proceedings of such Conferences attract wide attention and that the learned discussions help in correlating theory with practice and in encouraging the growth of art itself.

I note with great satisfaction that the Academy follows a policy of promoting greater mutual knowledge and appreciation between the two systems of Indian Music—the Northern and the Southern. I understand that the artistes of the concerts handle different styles, compositions and languages. What, on top of all, enhances the prestige of the Music Academy is that well-known musicians, composers and musicologists from European countries, Canada and the United States come to attend its Conferences.

Thus, one will practically see that regional differences, language differences and differences beween nation and nation lose their edges when Music alone is taken into consideration. Music appeals to the minds and hearts of all alike and transcends all man-made barriers. One of the facets of our rich spiritual and cultural heritage is Music including our dance and drama. We know that our saints and savants have, from

time immemorial, employed Music in the worship of God, and their songs are sung in every nook and corner of India. According to the Sikh Guru the best way of being attuned to God is through music and songs sung in His praise. We may have different languages in different regions of the country and we may have different customs and manners. But there is a thread of fundamental unity running through us all, binding us together as one People and as one nation. Our fine arts have, in no small measure, contributed to the building up of this essential unity in the midst of apparent diversity. It has also to be noted that our freedom has brought with it a cultural renaissance, and the State also tries to do as much as it can to promote and encourage our fine arts, by giving awards to distinguished and talented artistes all over the country. As a means of mass communication, the Radio is doing much to popularise music and other arts.

When we are thus conscious of the unifying role our Music can play, we should not lose any time in utilising this wonderful instrument to bring about national and emotional integration at home and spread the gospel of peace abroad. Our cultural missions abroad are the best means of promoting goodwill and mutual understanding. The efforts made by institutions like the Music Academy to preserve our fine arts in their pristine purity, to popularise them in a scientific and systematic way, and to set certain high standards for them deserve our encouragement and praise. The task of attracting the younger generation to our priceless cultural heritage is yours and of other institutions with similar objectives. I am therefore glad that the Academy recognizes and brings to light new and undiscovered talent and introduces young musicians to the public. The award of scholarships instituted by the Academy and the College of Music run by it will, I am sure, prove very useful in passing on to future generations the heritage we have in our possession to-day.

I offer my best wishes to the Music Academy. I have now great pleasure in declaring open this Fortieth Conference."

He then declared open the XLth Conference and the connected performances.

Vote of thanks

Sri V. K. Ramaswamy Mudaliar, one of the Trustees of the Academy, thanked the Governor for having kindly inaugurated the XLth Conference of the Music Academy. He also thanked Sardarini Ujjal Singh for her presence in the Conference.

ELECTION OF THE PRESIDENT

Sangita Kalanidhi Musiri Subramania Iyer proposed that Vidvan Sri Palghat T. S. Mani Iyer be elected President of the fortieth Conference of the Academy. He described Sri Mani Iyer as having shot up at a very young age like a meteor into the musical firmament. The proposal was seconded by Sangita Kalanidhi T. Chowdiah. Vidyala Narasimhalu Naidu and Sri K. Chandrasekharan in supporting the proposal paid tributes to the attainments of Vidvan Palghat Sri T. S. Mani Iyer.

Vidvan Mani Iyer received tremendous ovation as he rose to deliver his Presidential Address, which he did in Tamil.

வித்வான் பாலக்காடு மணி அய்யர் அவர்களின் அக்ராஸன பிரசங்கம்

கனம் கவர்னர் அவர்களுக்கும், மகா வித்வான்களுக்கும், மற்ற எல்லோருக்கும் வணக்கம். இந்த மியூஸிக் அகாடமியின் நாற்பதாவது வருட விழாவில் என்னை கௌரவித்துத் தலைமை வகிக்கும் பொறுப்பு அளித்தமைக்கு என் நன்றியைத் தெரிவிப்பதுடன், என் பணியை செவ்வனே செய்ய உங்கள் எல்லோருடைய ஒத்துழைப்பையும் எதிர்பார்க்கிறேன்.

சம்பிரதாயத்தையொட்டி என் தலைமையுரையை ஆரம்பிக்கிறேன். நான் சொல்லக்கூடிய விஷயங்கள் சங்கீத சாஸ்திரங்கள் படித்தோ, அல்லது மிருதங்க புத்தகங்கள் படித்தோ சொல்பவையல்ல. கடந்த நாற்பத்திமூன்று வருடகாலமாய் கச்சேரிகள் செய்து அதன் மூலம் கிடைத்த அனுபவங்களைக் கொண்டு சொல்பவைகள் என்பதையும் தெரிவித்துக்கொள்கிறேன். எனக்குப் படிப்புக் கிடையாது ; ஐந்தாவது வகுப்புடன் படிப்பை நிறுத்திவிட்டேன். முதலில் நான் சொல்வது என்னவெனில், முன் ஜன்மாந்திர வாசனையுள்ளவர்கள் மட்டுமே இவ்வித்தைக்கு வரலாம். இதை மூன்று வகையாகப் பிரிக்கலாம். (i) முன் ஜன்மாந்திரத்தின் விட்டகுறை தொட்டகுறை என்பார்களே, அப்படி உள்ளபடி ஜன்மாந்திர வாசனையுள்ளவன், ரொம்ப சொல்ப காலம் குருகுல வாசம் பண்ணி பதினுன்கு வயதிற்குள்ளேயே சுமார் ஆயிரம் பேர் கூடியிருக்கும் சதஸ்ஸில் சச்சேரி செய்து, அவ்வளவு ஜனங்களுடைய கவலைகளையும் மறக்கச்செய்து, சந்தோஷப்படுத்தி விடுவான். ஆனுல் இதை எதிர்பார்க்கவே கூடாது. இப்படி வருவது மிகமிக துர்லபம். பல தலைமுறைக்குள் யாராவது ஓரிரண்டு பேர் இருக்கலாம், அவ்வளவு தான்.

(ii) இது இப்படியிருக்க, ஒரு சிலருக்கு எவ்வளவு சொல்லி வைத்தாலும் ஜன்மம் பூராவும் வராமலேயே போய் விடுகிறது.

(iii) மேற்சொன்ன இரு ரகங்களுக்குமிடையே இருப்பவர்களைப் பற்றித்தான் கூற வேண்டியிருக்கிறது. அதாவது, நல்ல ஜன்மாந்திர வாசனையுடன் இத் தொழிலுக்கு வருபவனைப் பற்றியதுதான். இதில் அவரவர்களின் வாசனைக்கு தகுந்தபடி வித்தை சித்திக்கும் என்ருலும் பொதுவாக நம் உபதேசங்களும், எப்படி குருகுலவாசம்

செய்வது, எப்படி அப்பியசிப்பது முதலியவைகளெல்லாம் கூற வேண்டியிருக்கிறது.

இந்த வித்தைக்கு வருபவர்கள் அதிபால்யத்திலேயே ஆரம்பிக்க வேணும், பத்து வயதிற்குள்ளாகவே ஆரம்பிக்கவேணும். இந்த வித்தைக்கு, வரும்போதே பணம் சம்பாதிக்க வேணும் என்ற எண்ணத்துடன், இதைக் கற்றுக்கொள்ள முன்வரக்கூடாது. சுமார் பத்தாண்டு குருகுலவாசமும், மேற்கொண்டு கச்சேரிகள் கேட்டும், கண்டும் சுற்றி அலேந்து நாலேந்து வருஷ அனுபவமும் வேணும்.

இந்த வித்தை அதிகமாய்ப் பேசப்படக்கூடியதல்ல. அப்படி பேசப்படுவதாயிருந்தாலும், தொழில் செய்யப்பட்டவர்கள் தான் சங்கீத நுட்பங்களே உட்புகுந்து பேசலாம். ஏனேயோர் மேலெழுந்த வாரியாகப் பேசலாமேயன்றி, உட்புகுந்து பேசுவது சரியில்லே. இந்தக் கலேயில் அதிகமாகப் படிப்பதற்கும் இல்லே. கொஞ்சமாகத் தெரிந்து கொண்டதை பக்தியுடனும், ஏகாக்கிர சித்தத்துடனும், குரு பக்தியுடனும், தினேதினே விடாமல் அப்பியாசம் செய்வதில் தான் இருக்கிறது. அப்பியாச முறையைப் பற்றி ஒரு வார்த்தை. மிருதங்கம் என்று எடுத்துக் கொண்டால், ஒரு சின்ன பாடத்தை தெரிந்து கொள்வது, பிறகு அப்பாடத்தை விலம்ப காலத்தில்—அதாவது தேசல் மாசல் இன்றி எந்தக் காலம் வருமோ அந்தக் காலத்தில்—சாதகம் செய்வது. இது மிக முக்கியம். சுத்தமாக வந்த பின்புதான் காலத்தைத் தள்ளலாம்.

கைக்கு நன்ருய் வந்த பின்னரே விலம்ப, மத்யம, துரிதம் என்ற மூன்றுகாலமாக சாதகம் செய்யவேணும். ஒரு பாடத்தில் நல்ல தேர்ச்சியடைந்த பின்பே மறுபாடம் கற்றுக்கொள்ளலாம். இப்படி ஒவ்வொரு பாடமாகச் சாதகம் செய்யவேணும். ஒன்றையே திரும்பத் திரும்ப வாசிப்பதிலும், பாடுவதிலும் தான் ஸான்னித்யம் ஏற்படுகிறது. ஒரே பூஜையை தினே தினே பண்ணிப் பண்ணி எப்படி ஸான்னித்யம் அடைகிருர்களோ, அதே போன்றது தான் சங்கீதமும்.

சங்கீதத்தில் புதியவைகள் இல்லே என்று சொல்லலாம். ஒன்றிலேயே புதுப்புது அனுபவங்களேயும், ஆனந்தத்தையும் அடைய வேணுமே தவிர, புதிதாக ஒன்றைப் பிடிக்கக்கூடாது. காயத்ரி மந்திரத்திலும், ராம ஜபத்திலும் புதிது உண்டா? புதுப்புது அனுபவங்களே தவிர, மந்திரத்தில் புதிது இல்லே. அதேபோல்தான் சங்கீதமும்.

தற்காலத்தில் கர்நாடக சம்பிரதாய சங்கீதத்தில் நிறைய அனுவசியங்களைக் கலக்கிறார்கள். எது அனுவசியம் என்பதை எப்படிச் சொல்வது? அதை ஓரளவு தான் கூறமுடியும். அதாவது வாய்ப்பாட்டு சங்கதிகள் என்றும் வாத்ய சங்கதிகள் என்றும் ஓரளவு பிரிக்கலாம். நாகசுரம், பிடில், மிருதங்கம், தவில், வீணை, புல்லாங் குழல் முதலிய வாத்யங்களின் அமைப்புக் கேற்றபடி, சங்கதிகள் பிருகா முதலியவற்றை அனுபவ ரீதியாய் மகான்கள் ஓரளவு கண்டு வகுத்து வைத்திருக்கின்றனர். எனவே, அனுபவ பூர்வமாய் நான் கண்டதில் வாய்ப் பாட்டுத் தான் ஆதாரம். சம்பிரதாயமான வாய்பபாட்டில் கூடியவரை வாத்ய சங்கதிகளைக் கலக்காமல் இருப்பது நலம். ஆனால் வாத்ய சங்கீதத்தில் முடியுமளவிற்கு வாய்ப்பாட்டு மாதிரியே ஆவது நல்லது. எந்த வாத்யமும் வாய்ப் பாட்டு மாதிரி ஆவது விசேஷம். மாறாக, வாய்ப்பாட்டு வாத்யங்கள் மாதிரி ஆவது சிலாக்கியமில்லை என்பது என் அபிப்பிராயம்.

இதைத்தவிர, ஒவ்வொரு ராகத்திலும் உருப்படியிலும் புராதன மாகவும், அனுபவ பூர்வமாகவும் தாய்சங்கதிகள் என்று இருப்பதுடன் கூட, ஒரு பிரத்யேக உருவமும் உண்டு. இவைகளை மாற்றவே கூடாது. இதில் கற்பனை என்று கூறி, ஏதேனும் சேர்ப்பதால் அனுவசியம் கலக்கிறது. அதிகமாக வாத்ய சங்கதிகளை வாய்ப் பாட்டில் கலப்பதாலும் அனுவசியம் தோன்ற ஏதுவுண்டு.

ஒரு நல்ல வித்வானின் லட்சணம் என்ன வென்றால் பண்டித பாமரர்கள் நிறைந்த ஒரு சதஸில் மூன்று மணி நேரம் எவ்வித அபிப்பிராய பேதமின்றி, சதஸில் உள்ளவர்களுக்கு யாதொரு கவலையும் தெரியாதபடி, மெய் மறக்கச் செய்து சந்தோஷப்படுத்த வேணும். மேலும், ஒரு மாமாங்க காலம் நித்யப்படி கச்சேரி செய்தாலும், கேட்பவர்களுக்குச் சலிப்புத் தட்டாத வகையிலும், மேன்மேலும் ஆனந்தம் பெருகும் வகையிலும், இந்த நாத வித்தை யைப் போஷிப்பவர்களைத்தான் மகாவித்வான்கள் எனச் சொல்ல லாம். ஏதோ ஒரு சில கச்சேரிகள் நன்றாயிருப்பது போல் தோன்றி, வரவர ரஸக்குறைவு ஏற்பட்டால் பிரயோஜன மில்லை. இப்பொழுது எல்லாம் அப்படித்தான் காண்கிறோம். இதற்குக் காரணம் என்ன வெனக் கவனிப்போமாயின், சரியான உண்மை வழியில் அதிக அப்பியாசமில்லாமல், ஜனங்களை சுலபமாக சந்தோஷப் படுத்து வதற்காக—அடிக்கடி அப்ளாஸ் வாங்குவதற்காக—உண்மையான இவ்வித்தையில் அனுவசியங்களைப் புகுத்துவதுதான். இவ்விஷயத் தில் இளம் வித்வான்கள் மிக ஜாக்கிரதையுடன் இருக்கவேணும்.

அனுவசியம் எது என்பதைக் கண்டு பிடிப்பது மிகுந்த சிரமம் தான். இதைக் கண்டுபிடித்து விலக்குவதில் தான் உண்மை வித்தை புலப்படும். மேலும் அப்ளாஸ் வாங்கக்கூடிய சங்கதிகளுக்கு முதலில் கொஞ்ச நாட்கள் அப்ளாஸ் விழுந்து, பிறகு அதே சங்கதிகளுக்கு அப்ளாஸ் விழாமல் ரஸக்குறைவு ஏற்படும். நெற்பயிரைப் பூச்சி வராமல் காப்பாற்றுவது போல் இதைக் காப்பாற்றவேண்டும்.

இவ்வளவு கொஞ்சமாகத் தானே கற்றுக்கொள்ள வேணும், இதற்குப் பத்து வருஷ குருகுல வாசம், பிறகு அனுபவம் முதலியன எதற்கு என்று கேட்கலாம்! கண்டிப்பாய் வேணும். ஏற்கெனவே நான் சொல்லியிருக்கிறபடி, மூன்று மணி நேரம் பண்டித பாமரர் நிறைந்த ஒரு சபையில், எவ்வித அபிப்பிராய பேதத்திற்கு இடமின்றி, அவர்கள் தங்கள் கவலைகளை மறக்கும் அளவிற்கு சந்தோஷப் படுத்தும்படியான திறமை வரவேணும் என்றால், பொதுவாக இவ்வளவு காலம் வேண்டும்.

மிருதங்கம் வாசிக்கும் வித்யார்த்திகளுக்கு சிலவற்றைக் கூற விரும்புகிறேன். கச்சேரியில் வாசிக்குங்கால், பாடகர் பாட்டை நிறுத்தும் வரையில் விடாமல் வாசிக்கக் கூடாது. பாட்டு ஆரம்பிக்கும்போதே, காலப்பிரமாணத்தைக் கவனிக்காது அவசரப்பட்டு வாசிக்க ஆரம்பிக்கக் கூடாது. பாட்டு ஆரம்பத்தில் விளம்பகால 'டேக்கா' அமர்த்தி, சமயத்திற்குத்தக்க மாதிரி மத்யமகாலம், ஃபரன் முதலியவைகளை உபயோகிக்க வேணும். தனி ஆவர்த்தனம் ஐந்திலிருந்து பத்து நிமிஷம் வரை வாசிக்கலாம். அதற்கு மேல் வாசித்தால் ரஸக்குறைவு ஏற்படும். வாசிப்பதற்கும் ஒன்றுமில்லை யென்பது என் அபிப்பிராயம். ஆனால் மிருதங்க வாத்யத்திற்கு மட்டும் இதைச் சொல்லவில்லை. வாய்ப்பாட்டு என்று எடுத்துக் கொண்டாலும், பிடில் இல்லாமல் பத்து நிமிடத்திற்கு மேல் ஒரு ராகத்தை தனியாகப் பாடினால் ரஸக் குறைவு ஏற்படும். பிடிலும் இதே போலத் தான். எல்லா வாத்யங்களுக்கும் இவ்விதி பொருந்தும்.

சுமார் இருபது ஆண்டுகளுக்கு முன் சங்கீதக்கலை பொது ஜனங்களின் இஷ்டத்திற்கு—அதாவது யார் யார் மூன்று மணி நேரக் கச்சேரியில் பண்டித பாமரர்களை மெய் மறக்கச் செய்து, ரசிக்கச் செய்கிறார்களோ அந்த வித்வான்கள் தான் முன்னணியில் இருப்பார்கள், இதர வித்வான்களை அவரவர் தரத்திற்கு தக்கபடி கௌரவிப்பார்கள். இப்பொழுது இது மாறிவிட்டது. இசைக் கல்லூரிகள், ரேடியோவில் நாள் முழுதும் நிகழ்ச்சிகள், இதற்

கெல்லாம் அதிக வித்வான்கள் தேவைப்படுவதால், சாதாரண வித்வான்கள் தேவைப்படுவதால், சாதாரண வித்வான்களுக்கும் உத்யோத்தினுல் அதிக மதிப்பு ஏற்பட்டிருக்கிறது. இது வரவேற்கத் தக்கது என்ருலும் வித்தையின் தரம் ரொம்பக் குறைந்து விடுகிறது. நிற்க அரசாங்கத்தார், வித்யார்த்திகளுக்கு ஸ்காலர்ஷிப், இளம் வித்வான்களுக்குச் சபைகளில் கச்சேரி செய்ய வாய்ப்பு அளிப்பது, மற்றும் சங்கீதகலேக்காக நிறையப்பணம் செலவழிக்கிருர்கள். இது அநேகமாய் நியாயமின்றித் தகுதியற்றவர்களுக்குப் போய்ச் சேருகிறது. இவைகளினுல் ஒரு சிலருக்குப் பண சம்பாத்யத்திற்கும், லௌகீக சம்பந்தமான காரியங்களுக்கும் சௌகரியமே தவிர, உண்மைக் கலேக்குப் பிரயோஜன மில்லே. இதை முழுவதும் சரி செய்ய முடியாதென்ருலும், கூடுமான வரையில் சரி செய்வதற்கு ஒரே ஒரு வழிதான் எனக்குப் புலப்படுகிறது. அது என்னவென்ருல், சங்கீத காலேஜுகளில் உத்யோகமளித்தல், வித்யார்த்திகளுக்கு ஸ்காலர்ஷிப் அளித்தல் இவை போன்ற சங்கீத சம்பந்தமான எவ்விதக் காரியம் செய்வதாயிருந்தாலும், அவைகளுக்குரிய கமிட்டி களில் தலே சிறந்த எல்லா வித்வான்களும் இடம் பெற்றிருக்க வேண்டும். இது இயலாவிடில் குறைந்தது பத்துக்கு ஏழு பேராவது இடம் பெறவேண்டும். ஒரு சில வித்வான்கள் மட்டும் இடம் பெற் றிருப்பது சரியன்று.

பொது ஜனங்களின் முன்பு சிறப்பாகக் கச்சேரி செய்து புகழ் பெற விரும்பும் இளம் வித்வான்கள் முக்கியமாக ஒரு விஷயத்தை நம்பவேண்டும். அது என்னவெனில், தங்களிடம் குறைகளிருப்ப தால் தான் தொழில் நடப்பதில்லே என்பதை பரிபூர்ணமாய் நம்பித் தன்னேத்தான் ஆராய்ச்சி செய்து, நன்ருய் அப்பியசிக்க வேணும். தொழிலும் பரிசுத்தமாக இருந்து ஓரளவு குணமும் நன்ருக இருந்தால் நிச்சயம் தொழில் நடந்தே தீரும் என்பது எனது பரிபூர்ணமான நம்பிக்கை. தொழில் நடப்பதற்காக யாரையும் பார்க்கத் தேவை யில்லே. நமக்கு வேண்டியது நம்மைத் தேடிக்கொண்டு வரும்.

கர்நாடக சங்கீதத்தின் அபிவிருத்திக்காக சுமார் நாற்பதாண்டு களாக உழைத்துவரும் மியூசிக் அகாடமி என்னென்ன செயல்கள் புரிகிறது என்று சங்கீத உலகமும், சபைகளும் ஆவலுடன் கவனித்து வருவதால் அகாடமிக்குப் பெரிய பொறுப்பு உண்டு. உண்மையான கலேயைக் கண்டுபிடித்து ஆதரவு கொடுக்க வேணும். அதேபோல் தரம் குறைந்த கலேகளே ஒதுக்கவும் வேணும். கர்நாடக சங்கீதத்திற்கும் தனித்தனி பாகங்களே பிரித்து,

டெமான்ஸ்ட்ரேஷன்கள் செய்யும்படி செய்து கௌரவப்படுத்தும் ஸ்தாபனம் வேறு எங்கும் இல்லை.

அகாடமி சரியான வழி காட்டவில்லை என்று நான் சுமார் நான்கு வருஷகாலம் கலந்துகொள்ளாமலிருந்தேன். பிறகு நண்பர்களின் வற்புறுத்தலினுலும், பிரிந்து இருந்து சாதிப்பதைவிட சேர்ந்திருந்து சாதிக்கலாம் என்ற நம்பிக்கையுடனும் என் கருத்தை மாற்றிக் கொண்டேன். ஸ்ரீ ஆஞ்சநேயருக்குத் தன் பலம் தெரியாது என்று சொல்லுவார்கள். அதே போலத்தான் அகாடமிக்கு அதன் பலம் தெரியவில்லை என்பது என் அபிப்பிராயம். கர்நாடக சங்கீதத்திற்கு அபாரமான தொண்டு செய்யக்கூடிய சக்தி அகாடமிக்கு உண்டு. இன்னும் எவ்வளவு எல்லாமோ அது செய்யலாம். ஆஞ்சநேயர் இலங்கைக்கு போகுமுன், ஜாம்பவான் உபதேசம் கேட்டுத் தன் பலத்தைத் தெரிந்து, மகத்தான காரியங்களைச் செய்தது போல், அகாடமியும் தன் பலத்தை உணர்ந்து கர்நாடக சங்கீதத்திற்கு அபாரமான தொண்டு செய்து வெகுகாலம் வாழவேண்டும் என்று ஸ்ரீ ஸத்குரு தியாகப் பிரும்மத்தைப் பிரார்த்தித்துக் கொண்டு என் பிரசங்கத்தை முடித்துக் கொள்கிறேன்.

Presidential Address

After paying his respects to the Governor, to the Vidvans and those assembled at the Academy and thanking the authorities of the Music Academy for inviting him to preside over the 40th Conference of the Academy, Vidvan Palghat Mani Iyer said that he looked forward to their co-operation in discharging his duty as President of the Conference.

He then said in his Presidential Address that whatever he wanted to say as President of the Confrence, he was not saying from his study of the general books on music or special books relating to his own speciality of Mridangam. He was going to say things born of his own experience over the long period of forty years during which he had been an active exponent of this instrument. In fact, he was not a learned man, what little education he had having been stopped at the 5th standard.

The first thing which he wanted to emphasise was that this was an art to which only those who were born to it and had native gifts could come. They could be classified into three

kinds: (1) those who had according to their traditional belief continuity in the practice of the art from their previous birth, for whom study with a Guru results in a perfection within their boyhood iteself, so that at that tender age they were able to entertain a gathering of over thousand people and make them immersed in a joy which makes them forget all their cares and anxieties. Such were indeed a rare phenomenon in the history of the art. Very few indeed were of this class. In several generations we might perhaps come across one or two of this class. Secondly there was the class of persons to whom nothing would come however strenuously they might be coached and taught. Thirdly there was a class in between these two. It was about them that we should speak. They had something of a gift and according to that they mmight benefit by proper teaching and training under a Guru. It was with reference to them that they had scope for speaking about how to learn and practise.

Those who come to this art had to start their training while yet they were very young. I would say that to start before they were ten would be best. No intention of making a profession of it or making money through it should form the incentive at that stage. For ten years they should remain with the teachers. Then they should start listening to performances and for about four or five years they should have this kind of further experience by seeing and listening.

There was not much in this art to be talked about. If it was to be discussed, it was only those who had a practical knowledge and performing ability that could enter into the subtleties of the art and speak about it. Others could only make mere general observations in a superficial way, but it would not be proper for them to speak about the intricacies of the art. Nor was there much to be known about this art by merely reading books. Whatever little one had learnt of this art, if one practiset daily with devotion, concentration and regard for his teachers, that would be the most necessary thing to do. Just one word about the way to practice. Taking the Mridangam for example, any short lesson could be learnt and that has to be mastered by playing it often, varying the tempo so that in whatever tempo one played that lesson would come off with its perfection. It was only after this mastery was gained that one had to quicken the tempo. It was after gaining good

dexterity of the hand that the variations in the three tempos should be tried. No new lesson should be taken before the older ones had been completely mastered and mastering one after the other was best. Playing the same things over and over again produced a perfection. Take for example a devotee doing the same Puja for his Ishta Devata day after day. Even so was the cultivation of a lesson that had been taken on.

There were no new things or innovations in the art, but within the same thing new experience and realisation of joys could be realised as one went on practising them. What is there novel in Gayatri or Rama Nama? The more they were recited and repeated the newer and newer revelations came.

In current Carnatic Music there were a number of unnecessary things which were being introduced. How to find what was unnecessary? It ws only possible to indicate this to some extent. For example, we could separate the variations or improvisations which was characteristic of voice and those which were peculiarly fitted to instruments : Nadasvara, Violin, Mridangam, Tavil, Veena, Flute. In accordance with the structure of these instruments, Sangatis, Brigas, etc. have been according to the experience of the great musicians recognised as belonging in a characteristic manner to these instruments. In his experience he had found that the basis of everything was in vocal singing and according to him it would be proper not to introduce into the vocal singing the Sangatis which were characteristic of instrumental playing. On the other hand, to introduce the Snngatis of the voice into the instrument and make it sound as if it was the voice was a praiseworthy thing. Whatever the instrument, it was a great thing to make it play like the voice. On the contrary, it was not desirable that the voice should imitate the instruments. This was his opinion.

Further, in every raga or a large composition there were Sangatis which were seminal, old and rooted in experienee ; there was also the characteristic individual form of each raga. Neither of these should be changed. Merely to lay claim to some originality, if something was to be added, there he thought came what he considered to be the unnecessary element. To this category belonged the attempt to reproduce on the voice Sangatis belonging to instruments.

What was the definition of a good artiste or Vidvan ? I think we can say that he was a good artiste who could hold an audience composed of lay as well as the erudite for over three hours and make them without any difference of opinion forget their own preoccupation and be immersed in the joy of music. Although one might be performing daily for decades, if he could sing in a manner which would not satiate the listeners and only add to their joy, such a musician might be called a great artiste, a Mahavidvan. He indeed enriched the Nada Vidya. It was no use if a few performances were apparently good and gradually there was a decline in the Rasa. Unfortunately, such was their experience now and hence their anxiety to look into the causes of that decline. To him it appeared this was due to lack of proper and true training and the anxiety to pander to the taste of the public and win easy applause by introducing whatever he had earlier referred to as unnecessary things. He would warn young musicians in this respect. It was no easy thing to lay one's finger on what is unnecessary, but it was in rccognising this unnecessary element that he would say that real music culture lay. That the executions which brought forth applauses gradually wore away and became insipid was known to them very well in their experience. He would give the analogy of protecting crops from pests.

He might be asked "What you hav emphasised is but a small quantum of the art. Why are ten years Gurukulavasa and practical experience needed for this?" He would answer "These are absolutely necessary." As he had already said these durations and this intensity of training were necessary if one should hold the audience of both the lay and the learned for over three hours and make engrossed in the enjoyment of the art and become completely forgetful of their own cares.

He then said that he wanted to point out one or two things of interest to those who would practise on the Mridanga. The Mridangist should not go on playing all the time till the vocalist stopped his singing. The Mridangist should not start off his playing as soon as the vocalist opened his mouth, without even waiting to know the tempo and the measure. He should at the beginning of the concert set the Tekas of the slow tempo and then according to the situation proceed to the medium tempo and use pharans etc. Solo improvisation in Mridangam would be alright for a duration

of five to ten minutes. To protract it longer affected enjoyability. He would say there was indeed nothing to play beyond that duration. He was not saying this only for Mridangam instrument. Even for voice, he thought the development of a raga for a duration of more than ten minutes, that was minus the time taken by the violinist, could make it only stale. The solo interlude on the violin sailed on the same boat. What he had said would apply to all instruments.

Till about twenty years ago, only those artistes whom he had described above were in the forefront. Others received respect and opportunity according to their standard. Now the situation was changed. There were Colleges of Music and there was the All India Radio with its round-the-clock programmes. Naturally, a verylarge number of singers were necessary for this situation. Even those of modest attainment were able to gain a status by reason of an employment or a post in an institution which they got. This added to their standing, although this was not to be welcomed and could not be accepted when it was attended by steady lowering of the standard of our art. Government were giving scholarships to music students and young musicians were also given opportunities to perform. Much money was now being spent on behalf of music, but all such grants and stipends went in his opinion to those who were not fit for this. To some it added to their income, to their social and other purposes, but it could not be said to help the art as such. It might be said that it would not be possible to amend this completely, but to him it appeared that in a way to effect some improvement in this was possible. In Music Colleges or in the selection of students and young musicians for scholarships, in fact, in all matters concerning the art of music, the authorities concerned should appoint the outstanding expert artistes to the Selection Committees or at least the majority of the members of Selection Committees should be the leading artistes. To have the minimum of the artistes and to continue the same persons did not seem to be proper.

The young musicians who wanted to perform with distinction before the public and gain a reputation must have faith in one thing, namely, if they had not been able to make a mark, it was due to some shortcoming in them and that it was better to have an introspection and attempt to improve oneself. If one's art was pure enough and if one's conduct and bearing were also good,

there was no doubt that one would be able to make a mark and build up his career. That was his firm belief that to build oneself up there was no need to see anybody. On the other hand, what one sought would come of itself.

A great responsibility was on the Music Academy, Madras. For the past forty years, how it had been endeavouring in the field of Carnatic Music and what it had been doing in that field had been watched eagerly by the public as well as other sister institutions. Real art should be found and fostered and what was of lower standard should be eliminated. In the field of Carnatic Music there was no other Organisation except the Music Academy which had such comprehension and which, with an eye to every department of Music, organised the work of the Conferences through demonstrations etc. and honoured the votaries of the different aspects of this art.

He might say that for four years he had not been co-operating with the Academy, because he thought they were not showing the proper way. But later because of the persuasion of friends and by his own realisation that things could be achieved more by co-operation and work from inside than by standing out he changed his opinion. The saying was that Anjaneya did not know his own strength ; he thought similarly the Academy did not know its own strength, according to him. There was very much more which the Academy could achieve. Even as before flying over to Lanka, Anjaneya came to realise his strength on the advice of Jambavan and achieved several glorious things, even so, he prayed to their blessed Guru Sri Tyagabrahmam that the Academy also should know its strength, achieve many more successes in the service of Music and live for a long time.

The Conference Souvenir

The Souvenir of the 40th Conference of the Academy carried more then one special feature. As the Academy observed the Centenary of Smt. Dhanammal there was a special Supplement dedicated to the memory of Veenai Dhanammal, comprising articles on the life and appreciation of the art of Dhanammal and a large number of photographs of Dhanammal, members of her family and contemporary musicians and patrons. To commemorate the event of the foremost Laya Vidvan presiding over the Conference, another special Supplement was included in the

Souvenir consisting of photographs of leading Laya Vidvans in the recent history of Carnatic Music. The Souvenir carried several other interesting articles on Music: great Haridasa composers by Asthana Vidvan N. Chennakesavayya, Mysore; Gopalakrishna Bharati's Music by Sangita Kalanidhi Mudicondan Venkatarama Iyer, Sri Swati Tirunal as a Musician by Prof. R. Srinivasan; Sri B. Paramesvara Bhagavatar by Prof. R. Srinivasan. There was a special article on the President of the Conference Sri Palghat T. S. Mani Iyer by Sri C. K. Venkatanarasimham. The Souvenir also carried the usual account of the activities of the Academy and annotated programmes of all the concerts and performances of the season.

Agenda of the Conference

The following was the Agenda of the Experts' Committee meetings of the 40th Conference: —

1. Laya and Pallavi Demonstrations :—
   - (i) Tinniam Venkatarama Iyer—Pallavi in Gajalila Tala.
   - (ii) Vidyala Narasimhalu Naidu and Master Chandrasekharan—Pallavi in Chaturasra Rupaka 1/9.
   - (iii) Dr. Sitaraman of Madurai—A Pallavi as rendered by Mazhavarayanendal Subbarama Bhagavatar.
   - (iv) Tayambaka—Explanation by L. S. Rajagopalan and Demonstration by artists from Kerala.
   - (v) Vidvan Mottunuri Suryanarayana Sastri—Explanation by K. V. Subba Rao.
   - (vi) Harihara Sarma—Teaching Methods on Mridangam,
2. Vocal and Instrumental Demonstrations :—
   - (i) Vidvan Madurai Srirangam Iyengar—Vocal.
   - (ii) Vidvan Sri K. S. Narayanaswami—Veena.
3. Papers :—
   - (i) Vidvan Sri S. Krishnaswami of A. I. R., Bangalore—Drums of India.
   - (ii) Sri S. Venkatasubramani Iyer, Kerala University, Trivandrum—Panchavadya of Kerala.
   - (iii) Dr. T. S. Ramakrishnan—Sama Veda Chant.
4. Rare Compositions :—
   - (i) Vidvan Dandapani Desikar—Tiruvaimozhi.

(ii) Prof. Sambamoorthy and Smt. Sundari Srinivasan—Pallavi Sesha Iyer's Compositions.

(iii) Vidvan Chennakeshaviah of Mysore—Some Varnas, Kritis and Tillana.

(iv) A. K. Ganesan—Panchatalesvara Lakshana Gita.

(v) Sri S. Ramanathan—Prahlada Bhakti Vijaya Kirtanas.

(vi) Tanjore Sankara Iyer.

5. New Compositions:—

(i) Compositions of Lingappa Naidu by Smts. Ramu and Sarada.

6. Hindustani :—

(i) Pandit Ratan Jankar—Comparative Study of the Tala systems of the North and South—Talk and demonstration.

7. Other systems of music :—

(i) Dr. J. Spector, Professor of Ethnomusicology, New York.

(ii) Prof. Tosar Erracart of Uruguay—Western Music of the 20th century.

8. *21st December morning session: Dhanammal Centenary Celebration—Talks and Recitals.*

9. Any other subject to be taken up with President's approval.

Experts' Committee Meetings

THE FIRST DAY

19th December 1966

The meetings of the Experts' Committee of the 40th Conference of the Music Academy, Madras, began today at 8 a. m. at the premises of the Academy with Vidvan Palghat Mani Iyer in the chair. The proceedings began with the singing of select psalms from Divya-Prabandham by Vidvan Madurai Venkatesan accompanied by Vidvans Alandur Natarajan and Kandadevi Srinivasan. Dr. Raghavan referred to the special features of the 40th Conference being held under the chairmanship of the distinguished Mridanga Vidvan Sri Mani Iyer; a variety of features

on the side of *Laya* by experts from different parts of India had been arranged. He also mentioned that, that was the first Conference with Sangita Kalanidhi Sri T. L. Venkatarama Iyer as President of the Academy in succession to K. V. Krishnaswami Iyer.

Sama Gana

At the outset Dr. T. S. Ramakrishnan read a Paper on the Music of Chant of the Sama Veda, basing his observations on what he had listened to in the recitation at the last Conference of select *Samans* by Sri Ramanatha Dikshitar and Vidv an Pitchuman Iyer's rendering of the same on the Veena. It was announced that the subject of his paper would be taken up for detailed discussion at the next session.

Prahlada Bhakti Vijaya Kirtanas

Sangita Bhushanam S. Ramanathan then rendered select pieces from Tyagaraja's composition *Prahlada Bhakti Vijayam* recently edited by him. He rendered eleven full pieces and snatches of some others, including some in rare Ragas *Ghanta*, *Nagagandhari* and *Gaulipantu*, He was accompanied by Kumbakonam Krishna Iyengar on the violin and Karaikudi Muthu Iyer on the mridangam.

Answering a question at the end, Sri Ramanathan said that the *Varna-mettus* of the rare pieces in the composition were learnt by him from senior Vidvans like Sangita Kalanidhi Maharajapuram Visvanatha Iyer and from the Tillaisthanam sampradayami

The President Vidvan Mani Iyer complimented Vidvan Ramanathan on his excellent renderings.

THE SECOND DAY

20th December, 1966

At the meeting of the Experts' Committee convened in connection with the 40th Conference of Music Academy, Madras this morning in the premises of the Academy, with Vidvan Palghat Mani Iyer in the chair, there was first the recital of Tevaram hymns by Sri P. A. S. Rajasekharan of Mylapore, accompanied on the violin by Sri K. V. Tulasiram and on the Mridangam by Sri S. Rajagopalan.

Pallavi Seshayyar's Compositions

Prof. P. Sambamoorthy then gave an informative talk on the composer Neykkarapatti Seshayyar (1846–1908) from whose pupil Manathattai Doraiswami Iyer he himself had learnt music. Seshayyar was the son of Subbayyar, direct disciple of Tyagaraja. Besides being a composer, Seshayyar was also a performing musician and was noted for singing in the midst of pieces, *Kalpana Jatis* in the manner of *Kalpana Svaras*. Two of his pieces at least were widely sung - *Neeve na jeevamani* in Kedara and *Ika nannu* in Bhairavi. He handled Ragas like Sama, Purna Shadja, Garudadhvani, Manirangu, Navaroj and one of the rare ragas in which he composed was Mallika Vasanta, a janya of Mayamalavagaula. Tiruvorriur Ramaswami Iyer was a student of his. One of those who had learnt a large number of his pieces was Muthialpet Krishnan, well known Nagasvaram player of those days. Seshayyar composed about 300 pieces of which at least 150 pieces are available. Prof. Sambamoorthy showed also the manuscript copy in which Seshayyar himself had written down his pieces. A varna in Manirangu, a piece in Nagasvaravali, another in Kiravani, a kriti in Mallika Vasanta (sa ga ma pa ni sa - sa ni da pa ma ga ri sa), tillanas in Dhanyasi and Vasanta and a kriti in Navaroj of Seshayyar were then rendered by Smt. Sundari Srinivasan accompanied by Sri Chalakkudi Krishnan on the violin and Sri Pandanallur R. Srinivasan on the Mridangam.

The President of the Conference expressed his appreciation of the researched of Prof. Sambamoorthy and referred to Seshayyar's composition *Ika nannu* in Bhairavi which used to be sung very elaborately by Chembai Vaidyanatha Bhagavatar.

Dr. Raghavan mentioned that Prof. Sambamoorthy would bring out an edition of Seshayyar's compositions for the Academy before the next Conference.

Rare Lakshana Gita in Tamil

Violin Vidvan A. K. Ganesan then presented a hitherto unknown composition in Ragamalika beginning with Harikambhoji, set in five Talas, Srikara, Madhura, Sankha, Raja and Vidala. The composition was in five Khandas, Sutra, Upanga, Bhashanga, Sabda and Kavitva. It was a very intricate composition and in addition to the variations in the Talas, its Tamil

Sahitya embodied also the names of the different ragas and included jatis. The author called himself "Pravrddha Srimati Kumara". The language also changed over to Telugu in the Kavitva part. The total number of Avartas in the composition was 84.

Sangita Kalanidhi Mudicondan Venkatarama Iyer, thanking the young Vidvan, observed that this was a rare and important composition and its full beauty would be seen after this had been learnt and rendered in proper form by competent vocalists.

THE THIRD DAY

21st December, 1966

The meeting of the Experts' Committee of the 40th Conference of the Music Academy, Madras, to-day was dedicated to the memory of the late Veenai Dhanammal whose birth-centenary was observed by the Academy.

The Proceedings of the morning session began with the singing of the *Dhyana-kirtana* in Todi in the Kamalamba Navavarana series of Dikshitar by Smt. Rajesvari Ranganathan.

Dhanammal Day

The Music Academy, Dr. Raghavan said, decided to celebrate the birth-centenary of Veenai Dhanammal as part of its 40th Conference, and in addition to a special Dhanammal Supplement in the Souvenir of the Conference, the Academy decided to devote one of the morning sessions to this event. A portrait of Dhanammal, her Veena, and some other articles used by her had all been collected and displayed at the meeting. A rare collection of photographs of Dhanammal, her contemporary musicians, her teachers, and members of her family has been presented in the Souvenir of the Conference. That morning they proposed to observe the day with the playing of a selection of her records, with speeches by the President of the Conference and the Academy and other Vidvans who were intimately connected with her like Sangita Kalanidhi Papa Venkataramayyar and Sri Parur Sundaram Iyer and then with a programme of music by members of the family of Dhanammal.

The Celebration began with the song *Veenapustakadharinim* of Dikshitar in Raga Vegavahini, by Kumari Vegavahini, grand-

daughter of Dhanammal. The records of *Mahima Teliya* in which Dhanammal had accompanied her Veena with her voice, a part of the Ghanaragapanchaka and a piece in Todi were played.

The President of the Conference Sri Palghat Mani Iyer said Dhanammal's music was a supreme example of the quintessence in music and the avoidance of all surplus, exaggeration and needless elaboration.

Sangita Kalanidhi Sri T. L. Venkatarama Iyer recalled how his own awakening into the beauties of Dikshitar's music was due to his first listening to Dhanam's rendering on her Veena of Dikshitar's *Tyagarajaya Namaste* in Begada and how he had occasion to take his own Guru Ambi Dikshitar, son of Subbarama Dikshitar, to Dhanammal. One of Dhanammal's gurus was Sathanur Panju Iyer, a direct disciple of Dikshitar. He also referred to the fact that the Music Academy, Madras was doing its bit for fostering the great tradition and style of Dhanammal's music by having her oldest living daughter Smt. Jayammal and her grand-daughter Smt. Balasarasvati as Teachers in the Academy's Music College and Dance School.

Sangita Kalanidhi Papa Venkataramayyar who had written a detailed article in the Souvenir on Dhanammal recalled how at the instance of his own Guru, the late Violonist Govindaswami Pillai, he took to listening to Dhanammal's music constantly to get the correct perception of Ragas and their pure and authentic Sancharas.

Vidvan Parur Sundaram Iyer narrated several incidents connected with Dhanammal's Friday recitals at her home which, thanks to his inducement, several musicians and scholars and those interested in music like Musiri Subramania Iyer and Sri T. L. Venkatarama Iyer had begun to attend. He said that it was after listening to her rendering of *Chintaya makanda* that he gained knowledge of the correct style of rendering of such pieces. He referred to Dhanammal's prodigious repertoire of songs and his own efforts to persuade her to teach them or to come forward to record them. Even now the Dhanammal family was a repository of Kshetrajna Padams and it behoved them to teach them to others so that they might be preserved for posterity.

Sri T. Sankaran, grandson to Dhanammal, described the materials they had collected and displayed that morning, and

made special mention of two notebooks in which Dhanammal herself had written in her own bold hand in Telugu a certain number of songs including Tyagaraja Kritis and Padas for the sake of Kanakamba whom she taught. These precious notebooks were also of some academic value as they mentioned in Dhanammal's own hand the ragas of *Teliyaleru* as Todi (not Dhenuka) and of *Prananatha* as Sankarabharanam (not Sulini).

Then Smt. Jayammal assisted by Smt. Balasarasvati, and T. Visvanathan on the flute and T. Ranganathan on the Mridangam, sang two pieces. They were followed by Smts. Brinda and Mukta and Kumari Veghavahini, accompanied by Sri Annavarapu Ramaswami. The pieces rendered included a Dikshitar Kriti, a Tyagaraja Kriti, Kshetrajna Padas and Javalis.

Thanking the participants Dr. Raghavan mentioned the co-operation which the Academy had received from the members of the family of Dhanammal in the collection of materials for the Souvenir and for arranging the birth Centenary Programme that morning. He referred particularly to the appropriateness of the ending of the recitals that morning by Smt. Brinda and Mukta with the Javali *Smara Sundaranguni* in Pharaz by Dharmapuri Subbarayar who actually sang it on Dhanam in her own house in approbation of her Veena-music.

THE FOURTH DAY

22nd December 1966

When the Experts' Committee of the Music Academy, Madras, met this morning at its 40th Conference with Vidvan Palghat Sri Mani Iyer in the chair, there was first a rendering of the Second of *Navavarana* Kritis of Dikshitar, *Kamalamba Samrakshatu* in Ananda Bhairavi by Vidvan B. Krishnamurthi.

Rare Compositions

Sangita Bhushanam Tanjavur V. Sankaran assisted by M. S. Ramadoss and accompanied by Sri A. K. Ganesan (Violin) and Sri R. Venkataratnam (Mridangam) then rendered four rare Kritis.

Paraku jesina of Tyagaraja in *Jujahuli*, sung generally in Harikambhoji mela, was rendered by him in its correct Mela *Gayakapriya*. The three other pieces sung by him were *Kanikaramu* in

Anandabhairavi—Rupakam by Veenai Kuppayyar, *Sri Parvati* in Sriraga—Ata Tala by Kunnakkudi Krishna Iyer and *Sri Kamakshi* in Saranga—Adi by Annasami Sastrigal.

The President of the Conference Sri Mani Iyer expressed his appreciation of the Vidvan's renderings.

Sangita Kalanidhi Semmangudi Srinivasa Iyer observed that the Kriti in Jujahuli was generally sung in Harikambhoji Mela and that he did not think that it was necessary to change over to the Gayakapriya mela. He was generally not in favour of the Vivadi-melas.

Sangita Kalanidhi Mudlcondan Venkatarama Iyer said that the piece Jujahuli figured in the concerts of Konerirajapuram Vaidyanatha Iyer. It was one of the pieces whose rare ragas had changed over to the more popular ragas. According to him the correct Mela was Gayakapriya and in the rendering that morning, he wished *Suddha Dha* and *Suddha Ni* were more clearly emphasised.

Sangita Kalanidhi T. L. Venkatarama Iyer observed that there was a way of handling the Vivada-melas, avoiding undue emphasis and added that except for Jujahulī piece, the three other pieces sung that morning were absolutely new and they were very thankful to the Vidvan for that.

Pallavi Demonstration

Vidvan Vidyala Narasimhalu Naidu then presented with Master Chandrasekharan (on voice) accompanied by Parur Venkatarama Iyer on the violin and Karaikkudy Krishnamurti on the Mridangam, a new Pallavi prepared by him in Sankarabharanam, *Chaturasra Rupakam*, 1/9, *Sankirna*, with *Sama* in the last finger, *Amba Sri Kamakotinivasini*. In expressing his appreciation of the demonstration of Master Chandrasekharan, the President, Sri Mani Iyer, explained briefly the structure of the Pallavi sung by him. While all such skill was enjoyable, Sri Mani Iyer said, it should finally lead to the enrichment of thc music, which was particularly enjoyable universally when it came to *Sarvalaghu*; he added thas all such exercises were welcome and necessary, but compared to new Pallavis, which should be demonstrated before such Experts' gatherings, it was better for artists participating in concerts to show their skill and originality in well-known Pallavis with which the accompanists and listeners were familiar.

Sangita Kalanidhi Mudicondan Venkatarama Iyer complimented the guru Vidyala Narasimhalu Naidu on his mastery of Laya and also of Raga, and referred to several leading artists who had the benefit of his knowledge and teaching. He expressed agreement with the observations of Palghat Mani Iyer in respect of *Sarvalaghu* and its beauty and universal appeal and referred to the fact that all *Varnas* had a *Sarvalaghu*-passage, although this might not always be sung by the musicians. In the kutcheries of the past, displays of *Anuloma* etc. were not common; they may even be said to have been absent. *Rakti* and *Ragabhava* were not less essential to Pallavi.

THE FIFTH DAY

23rd December 1966

At the Experts' Committee meeting of the 40th Conferencc of the Music Academy, Madras, which was held this morning under the Presidentship of Vidvan Palghat Sri T. S. Mani Iyer, Kumari R. Vedavalli rendered the second *Navavarana Kriti* of Dikshitar in Kalyani.

New Compositions

Sri V. Ramachandra Naidu gave an account of his ancestor Sri Lingappa Naidu of Edamanal Estate in Shiyali Taluk (1800—1871), Sri Lingappa Naidu was the Dharmakarta of the Kalyana Ranganathaswami Temple at Tirunagari, the place of Tirumangai Azhwar. He was a devout person and well-versed in religious literature. Also deeply interested in music and Harikatha, he composed a number of songs which the speaker had collected together and published recently with the help of Tiruvizhimizhalai S. Kalyanasundaram Pillai. Set in Telugu and Tamil, these compositions had all the requisite characteristics of Karnatic Kritis.

The talk was followed by the rendering of three select pieces of Sri Lingappa Naidu by Smts. Ramu and Sarada accompanied by Alandur Natarajan (on the violin) and Melakaveri Krishnamurthi (on the Mridangam). Expressing his appreciation of the efforts of Sri V. Ramachandra Naidu, Sri Embar Vijayaraghavachariar referred to the association of his own family with Tirunagari village and temple and his own grandfather and father

Embar Varadachariar and Embar Srirangachariar having had close relations with Lingappa Naidu and his descendents.

Drums of India

Sri S. Krishnaswami, A. I. R., Bangalore, then read a paper on the Drums of India. Sri Krishnaswami who had already arranged an Exhibition of photographs and drawings of the drums of India as part of the Conference, traced in his paper the origin and development of percussion instruments in India, their migration abroad and the structure and technical characteristics of the different instruments. He said that of all indigenous Laya-Vadyas the South Indian Mridanga was perhaps the most perfect and highly evolved instrument.

Complimenting the speaker, the President of the Conference, Sri Palghat Mani Iyer observed that the Mridanga itself was smaller in size in the past and that it was only recently that it assumed the present length. Experience had led to its improvement. Sri Mani Iyer spoke of structure of the Mridangam, its upkeep and handling during the concert.

Thanking Sri S. Krishnaswami for his paper and exhibits Dr. Raghavan endorsed his appeal for the setting up of a museum of Indian instruments.

THE SIXTH DAY

24th December 1966

At this morning's sitting of the Experts' Committee of the Music Academy, Madras, convened in connection with the 40th Conference, with Vidvan Palghat Sri Mani Iyer in the chair, there was first the rendering of Dikshitar's *Navavarana-Kriti* by Vidvan Tiruvengadu Jayaraman.

Pallavi

Sri Tinniyam Venkatarama Iyer then presented with the assistance of his pupils a new Pallavi prepared by him in *Gajalila Tala*. The *Gajalila* was one of the 108 Talas and the Pallavi prepared by him was set in Todi and comprised 68 *Aksharas.* Vidvan Venkatarama Iyer himself played the Mridangam.

The President of the Conference, Sri Mani Iyer complimented Sri Tinniyam Venkatarama Iyer and his continued work in this direction. Sangita Kalanidhi Mudicondan Venkatarama Iyer

expressed the hope that Tinniam Venkataramier will take up the rarer and the more difficult Talas outside the list of 108 and offer every year a Pallavi in one of these.

Tayambakam

Sri L. S. Rajagopalan of Trichur then presented a paper on the Tala Vadyas of Kerala and *Tayambaka.* He referred to the four classes of instruments in vogue in temples and among tribes. He then introduced Sri Tiruvengappura Rama Poduval who played *Edakka* and sang to its accompaniment pieces from the *Gita Govinda*, as current in temple-service. This was followed by a demonstration for over an hour of *Tayambaka* on *Chendai* by Tritala Kesava Poduval and Party. Explaining the *Tayambakam*, Sri Rajagopalan said that the word was connected with *Sthaya* and meant the performance of the variations of rhythm (Laya-Vinyasa) as practised on Tala Vadya in Kerala. He explained the construction of the drum *Chenda* and the method of playing on it. Illustrating his talk, Sri Rama Poduval and his son Krishna Podual demonstrated the beginners' exercises including the *Śol* for Ganesa with which the exercises began. The *Śol* for different Talas was recited and demonstrated by the father and the son. The style of quickening the tempo was also illustrated. Effects to suit different themes were also practised on the *Chendai* when it was used as accompaniment to *Kathakali* and Sri Krishna Poduval illustrated Chenda-playing for different birds, animals, bees, etc., figuring in the different situations. It was explained that to obtain the great mastery of the wrist necessary for this play, the players were trained with the flourishing of a hard and heavy piece of tamarind-wood and, during the nights of the light fortnight, they were made to train themselves for the progressively increasing duration of midnight. The *Tayambakam* was always played on *Adi Tala*, called in Kerala as *Chembada*. that is, *Jhompata* of the old books, and the playing comprised five stages.

The President of the Conference, Sri Mani Iyer said he had grown from boyhood with the listening of these drum-displays of Kerala and in his own native place there were famous players of *Chenda*, as also some relatives of his who were experts in it. Mention was made of Malavakkavu Sangunni, Ramunni and Kesava Poduval, Pazhayanur Sankara Marar, Kadavullur Kunhikrisnha, Marar, Ponnani Ukkandu Marar,Tiruvengapuram Kutti-

krishna Poduval and Kondayyar, brother of Ghatam Vilvadri Iyer. Sri Mani Iyer said that the most remarkable thing that they must have noted in the playing, and which also constituted the essence of all Tala Vadyas, was the '*Sthana-suddham*' of the beat and observed that they were all grateful to the Academy where alone they could have an opportunity to have such rare aspects of the art brought out and presented.

Thanking Sri L. S. Rajagopalan for the efforts taken by him to bring the *Tayambakam* party, Dr. Raghavan mentioned that a couple of years back the *Samskrita Ranga* had brought *Koodiyattam* of Kerala temples to the City and they had an occasion then to witness and listen to *Tayambakam* played on the *Kudamizha*, the accompaniment of *Koodiyattam*.

THE SEVENTH DAY

25th December 1966

When the Experts' Committee of the Music Academy, Madras, reassembled this morning at its 40th Conference, with Vidvan Palghat Sri T. S. Mani Iyer in the chair, there was first the presentation of Dikshitar's Navavarana Kriti in Kambhoji by the students of the Central Karnataka College under the direction of the Principal, Sandhyavandanam Sri Srinivasa Rao.

Rare Compositions

Asthana Vidvan Mysore Chennakesaviah, accompanied by Sri Yethapur Srinivasan (violin) and Sri R. Ramachandran (mridangam), then presented five rare compositions. He first rendered a Varna in Kambhoji-Ata Tala—*Intachala,* and then Dikshitar's *Svetaganapatim* in the Melaraga Ragacudamani, *Nanu Broche*-Kirtana in Narayanagowla—Adi Tala by Veenai Kuppier, a Varna in Mukhāri—Adi Tala—*Madirakshi* and a Tillana in Kalyani by Vasudevachariar. The Vidvan said that he was rendering these according to the *Pathantara* from his guru, the late Mysore Vasudevachariar.

Dr. T. S. Ramakrishnan informed the Committee that the Kambhoji Varna was published as a composition of Pallavi Gopala Iyer in the *Sampradaya Pradarsini* and that Tiruvorriyur Tyagaiyar had published in his Pallavi Svarnakalpavalli *Nannu*

Broche and also the Varna in Mukhari which according to the *Mudra* Venugopala was a composition of Tiruvorriyur Tyagayyar.

In thanking Sri Chennakesaviah, Dr. Raghavan referred to the Vidvan's previous presentations of rare compositions which he had also edited in the pages of the Academy's Journal with notation.

Difficult Tala Demonstration

He then requested Sri Muttunuri Suryanarayana Sastri the 65 year old Bharata Vidvan of Srikakulam to give his demonstration of different Tala-Avadhanas, in which he kept more than one Tala and more than one Jati of a tala by different limbs of the body. Sri K. V. Subba Rao of Eluru introduced the old Vidvan and gave the explanations of the demonstrations.

Sri K. V. Subba Rao gave a brief biographical account of Sri M. Suryanarayana Sastri and his specialisation in Tala-Avadhana on the basis of a manuscript called *Nandikesvara Bharata*. The Vidvan was the son and student of Sri Sangamesvara Sastri. The Central Sangeet Natak Akademi had decided to take a sound-film of his exposition of Panchamukhi Talas. Sri Sastrl after reciting prayer verses on Vinayaka and Sarasvati, recited *Kauttas* or *Sabdas* on Vinayaka, Siva and Bhavani and then Kauttas suggestive of *gatis* of birds and animals like *Salyaka*, *Kuranga* and *Karandaka*. There were similar *Natya-gatis* for *gaja*, *turaga*, *mayura*, etc. Sri Suryanarayana Sastri then demonstrated the Panchamukhi Talas which he did at the last year's Conference—*Isvara Panchamukhi*, *Vishnu Panchamukhi*, *Brahma Panchamukhi* and *Anjaneya Panchamukhi*. The last one was in six *Kalas* and employed six limbs of the body. He exhibited also three examples of keeping two different talas by the two hands. Sri Subba Rao explained also in each case the Angas and the place where *Sama* was reached and also which part of the limb kept which *tala* and *gati*.

The President, Sri Palghat Mani Iyer expressed his appreciation of the special feats of tala performed by the old Vidvan from Andhra.

Veena Recital

After expressing the thanks of the Academy to Sri K.V. Subba Rao and Sri Mutunuri Suryanarayana Sastri, Dr. Raghavan

requested Vidvan Doraiswami Iyengar of Mysore to give his Veena recital. Accompanied by Sri Guruvayur Dorai, Sri Doraiswami Iyengar played first a Varna of Veenai Seshanna in Saveri-Jhampa, then the Tyagaraja Kriti *Dorakuna* in Bilahari, Alapa of the Ragas Dhanyasi, Ghana-raga-panchaka and Kedara and ended up with a small Pallavi in Trisra Triputa.

President Sri Palghat Mani Iyer expressed his appreciation of the recital of Doraiswami Iyengar and Sri T. L. Venkatarama Iyer referred to the appropriate choice by him of morning ragas beginning with Saveri and ending with Kedara.

THE EIGHTH DAY

26th December 1966

The Experts' Committee of the Music Academy, Madras, met this morning again in connection with their 40th Conference with the President, Sri Palghat Mani Iyer in the chair. At the outset, Master Chandrasekharan rendered Dikshitar's Navavarana Kriti in Bhairavi.

Veena Recital

Vidvan K. S. Narayanaswami of the Swati Tirunal Academy, Trivandrum, first explained and demonstrated on the Veena the nature and the essential place occupied in the conception of a Raga by *gamaka* or the *asaivu* of *svaras.* He took up a number of Ragas and showed this feature and observed that it was incorrect to say, as some critics do, that because of this *asaivu*, the exact relation to the Sruti could not be determined. Accompanied by Sri K. Sivaraman on the Mridangam, he then gave a recital on the Veena. After playing *Alapa* and *Tana* of the five *Ghana Ragas* and Kedara, he rendered the following pieces - *Janani ninnu vina* - Riti Gaula; *Chandram Bhaja*—Asaveri and *Gitarthamu*—Suruti.

Endorsing what Vidvan Narayanaswami said, the President Sri Mani Iyer thanked him on behalf of the Academy for his very practical demonstration. He said that Sri Narayanaswami's playing was marked by precision and proportion and he complimented Sri K. Sivaraman on the way he accompanied the Veena.

Western Music

Dr. Raghavan then introduced Prof. Tosar Errecart of Uruguay, Professor of Conservatoire of Music in his country, and

a pianist, composer and director. He had come to India through Unesco, being interested in Oriental Music.

Speaking on *20th Century Western Music* Prof. Tosar Errecart gave a general view of the situation in Western Music in the present time, when it had been undergoing many changes including important ones in its melodic, rhythmic, harmonic, formal and instrumental aspects and indeed in the aesthetic too. They might say that there were no special features in modern western music as such ; it might be just anything different from the traditional one. Since the beginning of the present century, a reaction against the earlier Romanticism had started with Debussy, Satie, Ravel etc. Romanticism was dying all around in the different arts and a new era was starting of which Debussy might be considered to be the forerunner. He invented new scales, a new harmonic language and a new form. In his short Orchestral piece of 1892 could be seen the incipient melodic idea for the flute alone, comparable to the Raga. There was a liberty of form, an anti-intellectual conception in his work. Maurice Ravel was still more aristocratic and his music, the finest and the most delicate of modern Western music, and his melodies were more pure and prominent. It was however the Russian composer Ignor Stravinsky who might be said to have introduced revolution with his first ballets "Fire-birds" etc., especially with his "Rite of Spring." He also found a new way in the aspect of rhythm. In the Romance languages, Rhythm was masculine and Melody feminine, which would compare with Indian conceptions of these two aspects of music. The Classical and Romantic periods neglected the rhythm. Rhythm was the essential element and while it could exist by itself, melody always implied some rhythm. Even the earliest work of Stravinsky like 'Firebirds' showed his rhythmical vitality. The speaker then illustrated by playing a dance from his Ballet "Dance of the King." Other revolutionary composers of the period were Arnold Schonberg, Von Weber, John Cage (U.S.), Karl Stockhansen in Germany, Pierre Boubz in France and Lingi Nono in Italy. In Music it was not always good to be extremely revolutionary. Some of the modern composers who were of this view were Sergei Prokofiew in Russia, Arthur Honeggar and Darius Milhand in France, Bela Bartok in Hungary, Paul Hindemith in Germany, Manuel Ch. Falla in Spain and Benjamin Britten in England, all of whom opened a new music and rich ways of

expression. For illustration, the speaker chose the compositions of Hindemith and Bela Bartok, which he played. There was another tendency since the World War to create a music which could be understood by the people at large and the composers in France followed this line. The object was to amuse the public rather than bring out any difficult technical things. Some of them for example Darius Milhand, Francis Poulene and Arthur Honegger introduced what may be called Neo-Classicism and a going back to the older Classical style. Paul Hindemith was the most important composer at this time. He used tonality, but with a free conception. The modern era may be described, at least in the Western world, as the technical age. Technology dominated all aspects of life and art. He played also a record of Bartok from his concerto for Orchestra. The period from the end of the Second World War upto date was the most difficult and complex one of our century. Arthur Honegger pronounced a few years before his own death that Western music would die in ten years. The question which they were faced with was 'Was Western Music dying?' and he would answer "Yes, in certain respects." Technical elaboration of Western music reached its climax between 1950 and 1955 and it was not able to go further on in this direction and every new work was work of mathematics and ingenuity, art being completely left out. There was no communication. However, music could never come to an end; people needed music and good music, now as well as before; may be, much more now than ever before. The music that we needed was no longer technical music or intellectual music but music simple and rich. The fact that they had a complete lack of great composers showed that they must go deep into their spirit and discover the fundamental basis of their music which was lost by being divorced of their primitive being and their spirit and intuition. Music must always be the expression of the spiritual simplicity and intuition, as other arts and religion.

One of the noteworthy schools in modern times was that of Arnold Schonberg, "Dodecaphonism" which evolved a twelve tone music (1921), a little difficult to explain, and neglected in his own time and accepted only after his death. It was completely an artificial system, though clever and logical. Gradually, exaggeration came into this kind of music, particularly with the increasing use of electronic instruments. The reaction to it was "the

chance music" in which everything was improvisation. Improvisation? Yes. But on what basis? They in India had their own traditional basis in their *ragas*, *talas*, and in their instruments since many centuries ago, and there was a way of improvisation which the musician and audience could recognise and whatever suddenly came or followed, each of them here understood. But they in the West had not this basis for improvisation. There were no *ragas*, no *talas*, no tradition; of these whatever they had, they had abandoned. They had now to rediscover these and the new basis of their music. Could they discover it? That was the problem of the West.

Making her observations on Prof. Tosar Errecart's paper, Dr. Spector, Ethno-musicologist from New York, complimented the speaker on his clear exposition and well-chosen examples. She said they were no longer in narrow local strips of culture or art, but they were in an age of world music.

Thanking Mr. Tosar Errecart of Uruguay and the Government of India and the Government of Madras for the participation of Prof. Errecart in the Conference of the Music Academy, Madras, Dr. Raghavan referred to the proper key in which Mr. Tosar Errecart's exposition was pitched. He referred to the continuous participation of Western musicians and musicologists in the Conference of the Music Academy, year after year, and the great and wide dissemination of musical concepts which was taking place now all over the world and the possibilities of new creative effort on the basis of the pooling of musical cultures from every part of the world.

THE NINTH DAY

27th December 1966

The Experts' Committee meeting of the Music Academy, Madras, convened in connection with its 40th Conference under the Presidentship of Vidvan Palghat Sri T. S. Mani Iyer, began its proceedings to-day with the recital of the Dikshitar's Navavarana Kriti by Vidvan Tiruvaiyaru Krishnamurthi.

Mridangam Teaching

Sri Harihara Sarma of the Jaya Ganesa Talavadyalaya gave an instructive exposition of the lessons and method of teaching

Mridangam from the beginning stages up to enabling one to accompany concerts. The way in which he had analysed the exercises and codified them and taught them was demonstrated by his students at different stages of training.

Sri Palghat Mani Iyer praised the qualities of Sri Harihara Sarma as a teacher and said that Sri Sarma was a student of Tanjore Vaidyanatha Iyer under whom he (Mani-Iyer) had himself had the benefit of learning a great deal in the art. He paid a tribute to Tanjore Vaidyanatha Iyer, their guru, for the purity and austerity of his art and practice, which refused to allow any popular or extraneous intrusions into the playing. As contrasted with the Pudukottah style of playing, the Tanjore style might be said to keep close to the Svaras of the singing of the vocalist. The *half Chapu* was one of the difficult things which he had learnt from Vaidyanatha Iyer. He appealed to the Mridangists not to introduce new *Sols*.

Demonstration of rare Kritis etc.

There was then the rendering of rare Kritis and Ragam, Tanam and Pallavi by Vidvan Madurai Srirangam Iyengar, the recipient of Presidential Award for Karnatic Vocal for the year. The Vidvan was accompanied by Master Chandrasekharan on violin and Sri T.K. Murthy on the Mridangam. Vidvan Srirangam Iyengar first s ang, according to the *patha* of his guru, Namakkal Narasimha Iyengar, the Kriti *Ennadu daya vatsuna* in Balahamsa by Patnam Subramania Iyer, a Tyagaraja Kriti in Kalavati, *Ennadu jutuno*, Dikshitar's Manipravala Kriti in Kapi—*Venkatachalapate* and Ragam, Tanam, Pallavi in Athana finishing with a Ragamalika comprising Anandabhairavi, Shanmukhapriya, Mohana and Sindhu Bhairavi.

The President spoke about the great tradition which Vidvan Srirangam Iyengar represented and his mastery of Pallavi. He also expressed his appreciation of Chandrasekharan's violin play, and Sri T. K. Murthy's Mridangam.

Sri T. L. Venkatarama Iyer referred particularly to the Vidvan's singing in two *Sthayis* and rendering *Tana* with *Tala* in accordance with traditional practice. He extended to him the felicitation of the Music Academy, Madras on his receiving the Presidential Award for Karnatic Vocal that year.

THE TENTH DAY

28th December 1966

At the Experts' Committee meeting this morning of the Music Academy, Madras, in connection with the 40th Conference, with Vidvan Palghat Sri Mani Iyer, the President, in the chair, Smt. Rukmini Rajagopalan and Smt. Sumitra Ratnam rendered the Dikshitar Navavarana Kriti in *Sahana.*

Pallavi

Dr. P. C. Sitaraman of Madurai gave a demonstration of a Pallavi which used to be rendered by the late Sangita Kalanidhi Mazhavarayanendal Subbarama Bhagavatar, his guru. He was accompanied by Sri Parur Venkatarama Iyer on the violin and Sri Karaikudi Muthu Iyer on the Mridangam. The Pallavi was in *Useni* in *Tisrajati Rupaka Tala* in *Misra Gati.* Dr. Sitaraman rendered the same varying the Tala to *Tisrajati Triputa Tala* in *Khanda Gati.* Thanking Dr. Sitaraman for his demonstration, the President Sri Mani Iyer said what Dr. Sitarama Iyer gave them was the proper form of the Pallavi; its traditional pattern was almost set like a Kirtana and it was comparatively smaller than the later elaborate Pallavis which had come into vogue. He wished that Vidvans followed the practice of singing such neat Pallavis. He also complimented the accompanists, particularly Sri Muthu Iyer for the traditional way in which he rendered the *Trikala.*

Sangita Kalanidhi Mudicondan Venkatarama Iyer made a reference to the style of Mazhavarayanendal Subbarama Bhagavatar and also mentioned the particular propriety and appeal of the short Pallavis which used to be sung in the past. There were quite a good number of them which were worth demonstration, so that younger Vidvans might take to these for use in the concerts.

Hindustani

Ustad Nasir Ahmed of Delhi accompanied by Zahoo Ahmed Khan on the violin and Latif Ahmed Khan on Tabla then gave a demonstration on *Tan* in Hindustani music. Introducing him, Vidvan Sri T. V. Gopalakrishnan said that Mr. Nazir Ahmed Khan belonged to the Delhi Gharana and was a pupil of his grandfather Mamman Khan and Chand Khan his uncle and also

of Bundu Khan. Mr. Nasir Ahmed took Mianki Todi (Subhapantuvarali) and a Khyal therein in Ektal which he rendered in all the three tempos, illustrating the different kinds of *Tans* or the ways in which the Raga was developed through *a-kara*. He also sang a Tumri in Bhairavi.

There was also a demonstration by Lātif Ahmed Khan on Tabla playing, assisted by Zahoo Ahmed Khan on the Violin who played Bhairav.

The President complimented the Hindustani artists on their great *sadhakam* and their execution in the fast tempo. Mr. Mani Iyer also observed that those here should not start off imitating Hindustani artists without undergoing the required process of *sadhakam*.

Sangita Kalanidhi Sri T. K. Jayarama Iyer said that the Kutcheri plans of Hindustani and Karnatic schools were different and it was somewhat controversial to go into the background of this difference, but he might say that while they here had *mano-dharma* in a particular way and within particular limits, they in the North had in a composition like *Khyal* which itself meant 'what one pleased,' almost full scope for *mano-dharma*. They should have particularly noted the *Ghana-naya* of voice which the artist employed when different kinds of pieces set in different styles and sentiments were sung. Such a variation would be suitable, e.g when a Karnatic artist was to render different types of pieces like a Kriti, Pada or Javali. They should also have been struck by the *susvaram* and the *mandra-sthayi-sadhakam* of the Hindustani artists and the way in which after the singing of *Svaras* in *Vilamba*, the *Tan* (*A-kara*) was done in the next faster tempo. He also complimented the accompanists on the Violin and Tabla.

THE ELEVENTH DAY

29th December 1966

At the meeting of the Experts' Committee of the Music Academy, Madras, convened this morning in connection with the 40th Conference, there was first the rendering of Dikshitar's Navavarana Kriti by Smt. Kalpakam Swaminathan and Smt. Parvati Muthuswami. They sang also *Hastivadanaya*, Dikshitar's Kriti in *Navaroz* on Ganesa. Sangita Kalanidhi Semmangudi Srinivasa Iyer, expressing his appreciation of the renderings,

observed that the arrangements made by the Academy to have these Kritis rendered was of great significance as many of them were in very rare ragas and *Navaroz* and *Ghanta* rendered that morning were particularly to be noted, as they were slipping out of their memory.

Raganidhi

Dr. V. Raghavan explained how the Academy undertook to bring out with the partial aid of the Central Akademi the thesaurus of the Ragas of the Hindustani and Karnatic music compiled by Sri B. Subba Rao. The thesaurus contained detailed treatment with *Aroha* and *Avaroha*, special *Sancharas* and other noteworthy points and illustrative pieces of nearly a thousand *Ragas*, pointing out in each case parallel Ragas in the two systems wherever they were present. He requested the President of the Academy, Sangita Kalanidhi Sri T. L. Venkatarama Iyer, to release the IVth and last Volume of the *Raganidhi*.

Releasing the Book, Sri T. L. Venkatarama Iyer expressed his appreciation of the knowledge of the two systems displayed by Sri Subba Rao and the great pains he had taken to compile and complete this very important book of reference. Ragas, he emphasised, were the essence of Indian Music and hence this thesaurus of the Ragas of the North and the South was one of the most valuable works of recent times.

Sangita Kalanidhi Mudicondan Venkatarama Iyer also complimented Sri S. Subba Rao on his attainments and congratulated him on the achievement.

Replying, Sri B. Subba Rao gave an account of how he came to conceive of this work and the method he set out for himself for collecting the material. He expressed his gratitude to the Central Akademi, the Music Academy, Madras and particularly to Dr. V. Raghavan for enabling him to bring out this work.

The Music Academy had resolved to confer a Special Certificate of Merit on Sri B. Subba Rao at the forthcoming Sadas on 1st January 1967, in appreciation of this work of his.

The President presented, in token of the release, copies of the *Raganidhi* to the author and to a few leading Vidvans present.

Hebrew Chant

Dr. Raghavan then introduced Dr. Johanna Spector of New York to give her talk on Samaritan Chant. He referred to her participation in the Academy's Conference a few years back and her special work in several Hebrew Synagogues, which she had visited for making recordings of the sacred Chants as prevailing in different schools.

Dr. Spector brought to the Academy the greetings of the American Council of Learned Societies and the American Society of Ethno-Musicology. She stated that her exposition of the Samaritan Chant had special reference to the paper of Dr. V. Raghavan published in the Journal of the Academy in 1953 where he had drawn attention to the striking resemblances between the *Sama Veda* chant and the Hebrew chants. Not much was known, the speaker said, about where the Samaritans came from and they might have had in the distant past, some connection with India. They had an archaic way of Biblical Cantillation and had only ten styles or melodies as against twentyseven of the others, thereby indicating the earlier state of development. It was these melodic types, she said, which might be the forerunners of *Maqam*, a concept similar to that of the *Raga*. The ten melodic types differed in the tempo, range, rhythm and melodic pattern and were sung on different occasions: New Moon festivals, weddings and the like. The Samaritans were at least 2500 years old and they considered themselves to be the truer Jews and the guardians of the law. They had a chequered career and today, their number was extremely limited. They had only sacred music performed by males and had no instruments and used only hand-clappings. In their Biblical cantillation they had to follow the graphic signs attached to every word of the text, comparable to the accents or the Svaras. These accents had also a syntactical purpose besides a musical significance, and in this respect also they bore a relation to the Vedic accentuation. It was unfortunate that the tradition about the musical interpretation of this chant was suddenly snapped by the death about a 100 years ago of a High Priest who kept it as a secret. The speaker then referred to the earliest aqphonetic signs (by movements of hands) used in all the ancient chants in Greece, Rome, Israel etc. comparable to the ancient Indian *Udatta*, *Anudatta* and *Svarita*. It was remarkable that although there were ten symbols prescribed

for the Hebrew chant, the Samaritans took only three out of them. They had also different styles of chanting, characteristic of different occasions, when they were singing at home, at the synagogue, at public readings, at New Moon, for the dead, for weddings and so on. They had even a special style of elaborate and ornamented chanting, sometimes the chanting of a single verse taking 60 seconds compared to the 9 seconds taken by an ordinary chanting. Ability to sing the more elaborate and difficult chant was considered to be a mark of distinction. The faster chants were simpler and devoid of ornamentation, the slower ones usually ornamented and heavy. The lecture was illustrated by the playing of the tape recordings of about six examples of Samaritan chants recorded by the speaker.

Thanking the speaker, Sangita Kalanidhi Sri T. K. Jayarama Iyer referred to the growth of the Academy's work and the way in which the horizon of music had been widened by such participation of musicians and musicologists from all parts of the country and from abroad. Sitting in the auditorium along with her, he had observed how keenly she was watching our music and taking detailed notes of every concert.

Divya Prabandham

Dr. Raghavan then referred to the work of Sri M.M. Dandapani Desikar, Principal of the Music College of the Annamalai University who had been for the past two years, trying to bring out the Hymns of the Divya Prabandham of the Alwars in proper musical notation, comparable to that of Tevaram. He requested Sri Desikar to give his exposition. Sri Desikar observed that the Tevaram and Divyaprabandham formed one whole and that what was applicable to the music of one collection applied equally to the other. They were contemporary and parallel compositions. There was comparatively a more continuous tradition in the singing of the Tevarams, but the singing of the Divyaprabandham according to the *Pans* had gone out of vogue. As one who had been born in the tradition of Tevaram-singers and had heard the traditional mode of singing the Tevarams from his elders, he had made an effort to set in proper melodic form a selection of Divyaprabandham hymns in the *Pans* following the melodic settings of the Tevaram hymns in the same *Pans*. Sometimes he discovered to his great surprise that not only the imagery but even the words

were very close in the Tevaram and Divyaprabandham. Sri Desikar then rendered eight selections, singing in each case the Tevaram first and then the Divyaprabandham in the same *Pan.* He was accompanied by Sri V. Sethuramiah on the Violin and Sri Lakshminarayanan on the Mridangam. The following pieces were rendered by Sri Desikar:

1. Tevaram–Venupuram–Jnanasambandhar – Natta Bhasha - Divyaprabandham – Tirumangaialwar – Tiruchirupuliyur - same Pan; 2. Jnanasambandhar – Tiruvanaikka – Pan Kausikam; Tirumazhisaialwar – Tirucchanda Viruttam – same Pan. 3. Jnanasambandhar–Pan Gandhara Panchamam (Kedaragaula) - Adinai; Tirumangai-same Pan-Vandunu. 4. Pazham Takka Ragam (Suddha Saveri) Iraiyarum; Nammalvar – same Pan – Silamela. 5. Sundaramurti – Natta (Pantuvarali) Pon seita; Tirumangaialwar – same Pan – Taye Tantai – Tirupati. 6. Appar – Tiruttandakam – Pullirukku Velur; Tirumangaialwar — Tiruneduntandakam. 7. Appar – Vanapavalavai – Pan Gandharam (Navaroz); Tirukkannapuram – Silai Ilangu – Tirumangaialwar. 8. Tirunodittanmalai – Pan Panchamam (Ahiri) - Sundaramurti; Nammalwar – same Pan – Alagarkovil. He finished in Madhyamavati with a piece from Periyalwar's Tirumozhi relating to Deva Prayaga.

Appreciating the work of Sri Desikar, Sri Embar Vijayaraghavachariar said that even in its attenuated form, the recital of Tiruvaimozhi in temples showed traces of Ahiri, Navaroz, Kedaragaula, etc., and they were all glad that Sri Desikar had now come forward to do this very necessary piece of work of setting to music the Divyaprabandham hymns on the model of the Tevaram hymns, on the basis of the identical *Pans* mentioned in both.

Sri C. Seshachalam Chettiar recalled how about 40 years ago at Srirangam temple he had heard very good renderings of Divya Prabandham. The Tevaram and Divya Prabandham had a common mission and their composers belonged to a common brotherhood of Bhakti and formed a supreme example of integration. He referred to the musical settings provided by Ariyakkudi Ramanuja Iyengar and said that the work of Sri Desikar which was on a different line and followed the model of the Tevaram, was most welcome.

Sri T. L. Venkatarama Iyer thanked Sri Desikar for his participation and hoped that in the coming Conferences, he would give similar expositions of other hymns in the two collections of the Nayanmars and the Alwars.

THE TWELFTH DAY

30th December 1966

When the Experts' Committee meeting of the Music Academy, Madras, convened in connection with its 40th Conference, assembled this morning with Vidvan Palghat Mani Iyer in the chair, Kumari Priyamvada rendered Dikshitar's final Navavarana Kriti in *Ahiri*.

Piano Recital

Prof. Tosar Errecart of Uruguay who had earlier given a talk at the Conference on 20th Century Western Music gave a recital on the Piano. He chose the following pieces from composers including himself;

Franz Schubert—Sonata op. 122; Allegro Moderato; Andante; Menvetto: Allegro Moderato.

Johanness Brahms—Three intermezzi opus 118.

Hector Tosar (himself)—Three pieces; Intimate; Dramatic; Humoristic.

Maurice Ravel—Three pieces, from "Miroirs" (1) A boat over ocean; (2) Sap birds; (3) Alborada del Gracioso (The dawn of the jolly man).

Sri T. L. Venkatarama Iyer thanked him on behalf of the Academy for his participation in the 40th Conference.

Raga Concept

Mrs. Rajam of the Banaras Hindu University Music College then gave a talk and demonstration on the Concept of Raga in Hindustani and Karnatic schools. After a brief reference to the history of the Ragas in Indian Music, she said that among other differences, they found that Hindustani had, more prominently than in Karnatic, Ragas having the same Svaras but whose difference depended solely upon the treatment of the Svaras. Secondly, they in the North used different varieties of the same Svara in the same Raga. Thirdly, they developed new Ragas by

mixing two different Ragas. Mrs. Rajam then illustrated the above points by playing on the violin Puriya, Marva, Sohani; Miya Malar and Lalit. To show Ragas of same Aroha and Avaroha in both Karnatic and Hindustani, she played Pantuvarali (Karnatic) with a Kriti and Puria Dhanasri (Hindustani) with a piece in Ektal. For the Karnatic she was accompanied by Sri Nagore Ambi Iyer on the Mridangam and for the Hindustani by Latif Ahmed Khan on the tabla.

Congratulating Mrs. Rajam on her demonstration of both the styles, Pt. Ratanjankar pointed out that while it was correct to say that there were parallel Ragas in Karnatic and Hindustani having the same Svaras, all the same the impression produced by the Karnatic Raga was completely different from that of the parallel Hindustani Raga. For example, Hindola - Malkauns; Mohanam - Bhoopali; Iman - Kalyani. In the Pantuvarali and Puriyā Dhanasri that she played that morning, the two Ragas produced completely different impressions.

Expressing his appreciation of the demonstration, the President Sri Mani Iyer mentioned that the two schools, as they were, had developed their own intricacies and distinctness in several features and there was no question of any mixing of the two at this stage. Referring to the Tabla, he observed that while it was naturally a very sweet instrument, there was no need to compare it with the Mridangam whose technique of playing as a concert accompaniment was totally different and more complicated in relation to the singing of the main performer.

THE THIRTEENTH DAY

31st December 1966

When the Experts' Committee of the Music Academy, Madras, convened in connection with the 40th Conference with Vidvan Palghat Mani Iyer as President, met for the last day this morning, there was first a rendering of Dikshitar's *Siddhi Vinayakam* by Smt. Kalpakam Swaminathan and Kumari R. Vedavalli.

Tala System

Pt. S. N. Ratanjankar then gave a talk and demonstration on the Tala Systems of Hindustani and Karnatic music. After explaining the South Indian Talas, he pointed out the difference

and peculiarity of the Talas as handled by Hindustani musicians. He sang *Anupama-gunambudhi* in Khanda Chapu and then a Drut Khyal in Hindustani Atana – Trital. He explained how a Hindustani composition can be opened on any *Matra* other than *Sama*, on the 5th, 6th or 8th, the Drut Khyal sung by him in the seventh *Matra*, that is 10 *Matras* before the song. There were about 30 Talas in Hindustani of which 15 were in common vogue. Hindustani Talas had no Jatis as such in the manner in which Karnatic Talas had, and although some of them had identical *Matras* e.g., Ektal and Choutal, they were distinguished from one another by the Tekas, their tempo and their application. Variations of tempo or *Laya* were referred to as *Guni*, a term similar to *Jati*. The speaker then demonstrated the different tempos. He recited the bols and demonstrated the Hindustani Talas Kaharwa (4 Matras), Dadra (6), Teevra (7), Rupak (7), Dhumali (8), Jhap (10) as played on Mridanga and Tabla, Chautal (12), Ektal (12), Dhamar (14), Sula (10), Surjakta (10), Jhoomra (14), Dipchandi (14), Ada-chau-tal (14), Tilwada (16), Trital (16). These were played on the tabla by Sri Nageshkar. In addition to the above, the speaker said there were also a dozen or so additional Talas. One speciality of Hindustani Tala practice was that there were what were called *Gat Parans*, set compositions for the different Talas composed by the great Mridangam and tabla players of the past, which artists of Mridangam and tabla memorised. Two of these *Gat Paranas* were demonstrated by voice, beat of palm and on tabla by Sri Nageshkar, including the one called Namaskar Gat Parana, which was intended as a salutation to the assembly. The speaker then explained the difference in the style of accompanying the main vocalist, as prevailing in Karnatic and Hindustani schools. While the Karnatic mridangist had to account for every Matra of his Tala, his Hindustani counterpart did not need to do this, unless he was demonstrating with purpose. He was not expected to show off any extempore pattern of rhythm.

Sangita Kalanidhi Sri T. K. Jayarama Iyer speaking in appreciation of the talk and demonstration of Pt. Ratanjankar explained in detail in Tamil the differences in the conception and practice of the Talas in the two schools.

The President of the Conference Sri Mani Iyer, in expressing his appreciation of the exposition of Pt. Ratanjankar,

elucidated the real nature of *Solkattu* and *Tattakara* in the Karnatic school.

Sri T. L. Venkatarama Iyer referred to Pt. Ratanjankar's eagerness to learn from South Indian music as a true disciple of the late Pt. Bhátkande.

Papers

Dr. Raghavan then communicated the following papers of participants who could not be present at the session, viz., the *Panchavadya* by Sri S. Venkitasubramonia Iyer, University, Trivandrum; *Place of Rhythm in Art* by Prof. R. Srinivasan, Trivandrum and *Perception of Rhythm* by B. C. Deva, Special Officer for Music, Sangeet Natak Akademi, Delhi.

Dr. Raghavan also announced that the printing of Volume XXXVII of the Journal of the Music Academy was completed and the volume would be issued soon.

Felicitations

The Conference then expressed its felicitations to all those musicians and scholars who had received the Presidential Awards and Fellowships of the Central Sangeet Nataka Akademi.

Condolence

The Conference then stood for a while in silence in memory of the following musicians and participants in the Experts' Committee meetings of the Academy's Conference who had recently passed away:—Mrs. Alamelu Jayarama Iyer, Vidvans Tiruvalangadu Sundaresa Iyer, Sakkottai Rangu Iyengar, Umayalpuram Kodandarama Iyer, Ankiah, Prof. Vissa Appa Rao, Sri N. M. Adyantayya, Prof. G. H. Ranade of Poona, Sri D. G. Vyas of Bombay.

Concluding Function

Winding up the Proceedings of the 40th Conference, the President of the Conference Vidvan Palghat Sri Mani Iyer thanked all the Vidvans and mentioned particularly the President

and Secretary of the Academy who were with him, every day, during the last two weeks.

Sri T. L. Venkatarama Iyer spoke emphasising the importance of the Experts' Committee discussions and demonstrations which were not only instructive but also popular. He paid a tribute to the qualities of head and heart of Vidvan Palghat Mani Iyer whose few words were always pregnant and purposeful.

Speaking on behalf of the participants from the West, Prof. Tossar Errecart of Uruguay congratulated the Academy both on its Conference and its concerts which had produced a wonderful impression on him. He had only one observation to make for future consideration of the Academy, namely that they might have a few more instrumental performances included in the Festival.

Speaking on behalf of the Vidvans from outside Madras, Sri Veeriah Choudhury mentioned that they in Andhra held in high esteem Sri Mani Iyer, who had produced many pupils in Mridangam in Andhra.

Dr. Raghavan then, speaking on behalf of the Executive Committee of the Academy, thanked H. E. the Governor of Madras for opening the Conference, Vidvan Palghat Mani Iyer for presiding over the Conference, musicians and music scholars for their participation in the concerts and discussions, the foreign delegates, Prof. Tossar Errecart of Uruguay and Dr. J. Spector of New York, the North Indian musicians, the patrons and donors of the Academy, the public, the Departments of Government, Corporation, the Boy Scouts, the Press and especially the *Hindu*, the Committee Members who were in charge of the different departments of the Conference work, the Central Sangeet Nataka Akademi, the members of the family of Veenai Dhanammal and particularly Sri T. Sankaran for help in the preparation of the Dhanammal and Mridangam Supplements in the Souvenir.

The Conference came to a close with the singing of the Mangala Kriti in Sriraga of the Dikshitar Navavarana Series by a group of ladies and a group photo of the Experts and the participants in the discussions and concerts.

MEMBERS' DAY

1st January 1967

The Academy observed the Members' Day in the morning. There was an At Home. After light refreshments, the President of the Conference was garlanded and the Members spent some time happily on the New Year's Day.

The Sadas

At 4 p.m. the Sadas of the 40th Conference was held in the Auditorium of the Academy. The *Sadas* was presided over by Sri R. Venkataswami Naidu, Vice-President of the Academy. The gathering included Members of the Experts' Committee, and other musicians and conference participants, Members of the Academy and other distinguished visitors and music-lovers.

The Proceedings began with the Invocation song sung by Kumari R. Vedavalli.

Convoking of the *Sadas* was done by the Secretary of the Academy Sri S. Natarajan, after which the messages received after the Opening Day for the success of the Conference were read by Secretary Sri R. Ranganathan. The following messages were thus read:

The Prime Minister of India, Mrs. Indira Gandhi said in her message: "Over the years the Conference has grown into a major cultural institution" and sent her greetings to the musicians and scholars assembled at the conference and wished success to their deliberations.

H. E. The Governor of West Bengal has sent good wishes.

The Union Minister for Health has sent her good wishes for the success of the Conference.

Hon'ble Sri S. M. A. Majid, Minister for Local Administration, Madras State sent his best wishes and said that the thought provoking discussions of experts were an important aspect of the Conference.

Sangit Kala Kendra, Midnapur, West Bengal sent best wishes.

Sri Banda Kanakalingeswara Rao, Member of the Council of the Central Sangeet Natak Akademi, sent his best wishes.

Peter Bodeut, distinguished dance master of Budapest, who had participated in the Academy's Conferences sent his good wishes for the success of the Conference and the performances. He mentioned his highest admiration for the work of the Academy and the privilege of his having known the traditional artists connected with the Academy.

Howard Boatright, Dean of the School of Music, Syracuse University, U. S., who had participated in a previous conference of the Academy sent his greetings to the 40th Conference.

Mrs. Clifford Jones of the University of Rochester, U. S. who had worked in the Academy and participated in previous Conferences sent her best wishes.

Vidvans Mylattoor Ramachandra Iyer, Tanjore L. Ganapathia Pillai and T. N. C. Venkatanarayanacharyulu, Guntur, sent their good wishes.

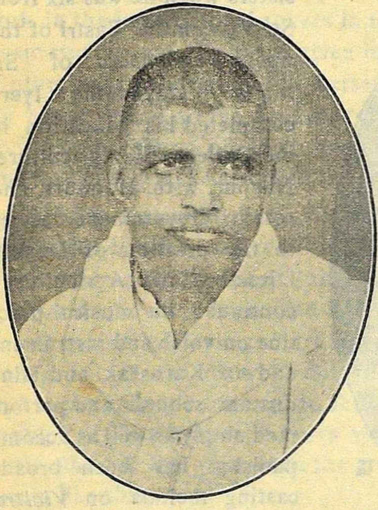
Sri R. Srinivas, Executive Officer, Southern Roadways sent his good wishes.

Sangita Kalanidhi Sri T. L. Venkatarama Iyer, President of the Academy then welcomed Sri R. Venkataswami Naidu, President of the Sadas and the large and distinguished gathering of *Sadasyas* met there to show their approbation of the chief function of the *Sadas* that evening, namely the honouring of the President of the 40th Conference, Vidvan Palghat Sri Mani Iyer. He referred also to the great help which Sri R. Venkataswami Naidu had been giving to the Academy.

Presenting the President of the Conference to the President of the *Sadas* for the conferment of the title of *Sangita Kalanidhi* on him, Sangita Kalanidhi Mudicondan Venkatarama Iyer, Principal of the Academy's Teachers' College of Music said :

Vidvan Palghat Mani Iyer

"Born in 1912 of Smt. Anandambal and Sri Tiruvilvamalai R. Sesha Bhagavatar, a well-known musician, at Pazhayanur; had his first lessons in Mridangam, when he was nine years old, from Sathapuram Subbier and later under Sri Viswanatha Iyer; started first accompanying Harikatha performances for his father when he was only ten years of age, and later of Sri Rama Bhagavatar, Ennappadam Venkatarama Bhagavatar and for Chembai Vaidyanatha Bhagavatar; with the last, had a successful all-India tour; had his debut in the Music Academy when he was only 14 years of age; came into contact with Mridangam Vidvan Tanjore Vaidyanatha Iyer with whom he had further training in the intricacies of the art; became closely associated in numerous performances with Pudukkottai Dakshinamurti Pillai; there has hardly been a musician who did not covet having him accompany on Mridangam; trained a large number of pupils and became the foremost Mridangist of the time; received Presidential Award for Carnatic Instrumental in 1956; was invited in 1965 to participate in the Commonwealth Music Festival in London and in the Edinburgh Festival; has dominated the field as the outstanding genius of Mridangam the very art of playing which *vadya* evolved into a new technique in his hands."



The President of the *Sadas* then garlanded Sri Mani Iyer and presented him with a medal and diploma conferring on him the title of Sangita Kalanidhi.

An additional Award of a Certificate of Merit was also presented at the *Sadas* to Sri B. Subba Rao of Mysore in recognition

of his services to the cause of music. Presenting him to the *Sadas* Dr. V. Raghavan, Secretary of the Academy, said:

"Born in 1894 of Smt. Venkatalakshmamma and Sri B. Ramaswami Iyer; started learning music along with his brother and sisters when he was six from Sri Visvanatha Sastri of the *sishya parampara* of Sri Maha Vaidyanatha Iyer; completed his education in the College of Agriculture, Nagpur, with Honours, and rose in Government service to the position of Deputy Director of Agriculture; continued his musical practice on voice and instrument and in Karnatak and Hindustani schools and performed singly as well as accompanist; has been broadcasting recitals on *Vicitra vina*; has been connected with the Board of Studies in Music at the Nagpur University and with several Committees and panels of the A. I. R.; has lectured and written on both systems of music and composed several new pieces in South Indian and North Indian styles and in Sanskrit, Hindi, Telugu and Kannada; has improvised a new stringed instrument called *Citravati Vina* to be played as a Been or Gottuvadya; a member of the Experts' Committee of the Academy which has brought out his *mognum opus*, the thesaurus of the Ragas of North and South called *Raganidhi*."

The President of the *Sadas* then presented him with a Certificate of Merit.

Musicians and experts then felicitated the recipients of the honour at the *Sadas*. Sangita Kalanidhi Alathur Srinivasa Iyer, the President of the previous year's Conference, offered his felicitations first to Sri Palghat Mani Iyer with whom he had long been associated. He was followed by Sangita Kalanidhi Semmangudi

Srinivasa Iyer, Vidvan Nori Nagabhushanam Pantulu of Hyderabad, Pt. Ratanjankar of Bombay and Dr. J. Spector of New York. Pt. Ratanjankar referred to the interest the Academy had been evincing in promoting mutual understanding between Hindustani and Karnatic Music and Dr. Spector referred to the Academy's work in the international sphere in the promotion of comparative music studies and the place given in its Conferences to students of other systems of music like herself. Mentioning that this was not her first visit to the Academy's Conference, she gave expression to the feeling of great joy and aesthetic gain which she always had when she attended the Academy's Conferences.

Sangita Kalanidhi Palghat Mani Iyer then spoke acknowledging the honour conferred on him by the Academy. In doing so, he referred to the entertaining and elevating roles of music. It was a divine art. It enabled him to merge his thoughts in the eternal rhythm of Time and get solace. Again he referred to his feeling that all was not well with their music and the desire to play to the gallery continued to show itself in many performances during the Conference. Cheers were not an essential aspect of music and in the past even the great musicians did not draw cheers like this.

Sri B. Subba Rao in acknowledging the Certificate of Merit awarded to him referred to his long study of the music of the North and the South and the thesaurus of the Ragas of the North and South which he had been compiling over the years. He mentioned that but for the timely interest that Dr. V. Raghavan as Secretary of the Academy took in his compilation, it could not have been published and the project completed according to plan. He acknowledged his gratitude to the Academy for the several opportunities which it had given him for his participation in the Experts' Committee Proceedings and to Dr. Raghavan in particular for enabling him to complete the publication of the *Raganidhi* according to plan.

Distribution of Prizes

The Sadas President then gave away the medals and Prizes to those who had come out successful in the several competitions in vocal and instrumental music held as part of the 40th Conference. Sri P. S. Ramachandran, Committee Member presented the candidates.

LIST OF PRIZE WINNERS

COMPETITIONS	DONORS	WINNERS
Vocal Gents	Sangita Kalanidhi G.N.B. Memorial Prize awarded by Sri R. Ranganathan	I Prize Lokanatha Sarma
Vocal Ladies	T. R. Venkatarama Sastri Prize awarded by Sri T. V. Rajagopalan	I „ Ananda Balasubramaniam II „ S. Suguna III „ N. Prema
Violin	Kasturi Ranga Aiyangar Memorial Medal awarded by Late Sri K. Srinivasan	I „ S. Manjula Spl. Prize K. Ranganathan
Veena	Dhanam Memorial Medal endowed by Sri M. Sudarsanam Iyengar	I Prize G. V. Janaki II „ Sudha Narayanaswami Spl. Prize K. Kalpakam
Modern Compositions	L. Muthiah Bhagavatar Memorial Prize awarded by Sri T. L. Venkatarama Iyer	I Prize Ananda Balasubramaniam II „ Lokanatha Sarma

COMPETITIONS	DONORS	WINNERS
Maharajah Svati Tirunal Compositions	Murthi Memorial Prize endowed by R. K. Murthi Memorial Committee	I ,, N. Kalpakam II ,, K. Marakatham III ,, Mythili Seshadri
Purandaradas Padams	Endowed by V. S. S. K. Tobacconist, Jaffna (1850-1950)	I ,, K. Kalpakam II ,, S. Rangamani
Tamil Songs	The "Amarar Kalki" Tambura Prize endowed by Sri T. Sadasivam	Special Prize C. Savithri awarded by Mrs. Lalithabai Shamanna I Prize S. Suguna II ,, Rukmini Ramani
Divyaprabandham & Tevaram	Sri Vijayaragavulu Naidu Memorial Tiruppavai Prize awarded by Vijayaragavulu Naidu Memorial Religious and Charitable Trust, Edamanal, Sirkali.	I ,, C. Savithri
Pallavi Singing	Dr. Sankaranarayana Iyer Memorial Prize endowed by Dr. S. S. Krishnan	I ,, Lokanatha Sarma

Teachers' College of Music

Sri Mudicondan Venkatarama Iyer, Principal of the Academy's Teachers' College of Music presented the students who had passed successfully the Teachers' Certificate Examination of the Academy, conducted by the Government of Madras and the *Sadas*-President then gave away the certificates to the Academy's students. The Raja Annamalai Chettiar Prize was awarded to S. Swarnambal and the R. M. Sarma Memorial Prize for Theory was given to A. R. Lakshmi.

Sri T. V. Rajagopalan then presented to the President of the Sadas the winners of the Special Prizes :-

Flute K. S. Gopalakrishnan, for the T. V. Subba Rao Prize for Junior Musicians awarded by the Academy's Exeeutive Committee.

Jr. Mridangam Vidwan Sri K. Parameswaran, for the Dr. Henry Cowell Prize endowed out of the royalties of his Madras Symphony.

Jr. Violinist Smt. Kanakavalli, for the Semmangudi Narayanaswami Iyer Memorial Prize endowed by Sri V. Panchapagesan, and Sub-Senior Musician : Sri J. Venkataraman, for the K. R Sundaram Iyer Shastiabdapurthi Prize.

President's Address

The President of the Sadas Sri R. Venkataswami Naidu then spoke. He first felicitated the musicians who had been honoured at the Sadas. He referred to the hoary traditions of Carnatic music and to the efforts of the Academy not only to preserve these traditions but also to discover and encourage the talent in budding musicians so that the future of Carnatic music might be taken care of. He referred to the work of the Academy and appealed to all patrons and lovers to assist the Institution in its great work.

Sri K. Chandrasekharan, Member of the Committee, proposed the Vote of Thanks to the President of the Conference, President of the *Sadas* and all those who had made the 40th Session a complete success.

THE MUSIC IN THE CHANT OF SAMA VEDA HYMNS

Dr. T. S. Ramakrishnan

1. The hymns of the Rig and Sama Vedas are the earliest examples of words set to music. These Vedic musical chants are perhaps a work of more than 4000 years ago. It is in the chant of the hymns of Sama Veda that we have the earliest beginnings of our present-day highly developed classical music, the finest of fine arts. These "beautiful Vedic musical chants have come down to us from the early dawn of civilization with unsullied purity and transcendental beauty, and are held in great venerable appreciation." Sama gana music is therefore rightly the very remote ancestor of our present-day Indian music.

2. Considering the above and the great sanctity of Sama gana chant we have been having on the first day of the Music Academy Conference, every year, the first programme as the chant of a few passages of hymns of Sama Veda to the accompaniment of Tambura Sruti, and the same immediately followed by a rendering on veena, quite ably, by Vainika Vidvan Sri Pichumani Iyer.

3. When during last year I listened to this rendering on veena, perhaps for the fourth time, I wondered why I should not make an attempt to define the music in Sama gana in terms of our present day Carnatic music. I immediately set about this task, of course, entirely depending on my observations based on the able rendering on veena by Sri Pichumani Iyer.

4. The Vidvan touched only five svaras on the veena which in ascending order of pitch are :—

(i) Chatus sruti Rishabha (Ri) ;

(ii) Sadharana Gandhara (Gi) ;

(iii) Suddha Madhyama (Ma) ;

(iv) Prati Madhyama (Mi) ; and

(v) Suddha Dhaivata (Dha).

We thus have an oudava scale, Shadja and Nishada being completely absent. These five svaras occurred in the passages in any order without any restriction, hovering around the central

svara, Suddha Madhyama. The noteworthy feature was the svara passages invariably commenced in the higher svaras and gradually descended in pitch and finally ended in the lowest svara Rishabha of a very short duration. This was the general rule for most of the passages. (This feature is confirmed and made particular note of, by the late Sri M. S. Ramaswami Iyer in his commentary on Svara Mela Kalanidhi by Ramamatya). Only in one or two instances the svaras of the passages after reaching the top svara Dhaivata ended in the next lower svara Panchama, again of a very short duration. This extra svara Panchama was the sixth svara ever touched, only as a short end svara only in one or two of the passages.

5. An important point observed was both the svaras Suddha Madhyama and Prati Madhyama freely occurred side by side without any restriction whatever and hence this Prati Madhyama has to be considered and named Vikṛta or Chyuta Panchama. Now the five svaras used can be written in ascending order of pitch as ;—

(i) Chatus sruti Rishabha (Ri) ;

(ii) Sadharana Gandhara (Gi) ;

(iii) Suddha Madhyama (Ma) ;

(iv) Chyuta Panchama (Pi) ; and

(v) Suddha Dhaivata (Dha).

This is a scale from the Chyuta Panchama Mela series (vide my article on Chyuta Panchama Melas read during the 1932 year conference). Assuming Sa, in this scale Ri, Gi, Ma, Pi, Dha, the poorvanga Ri Gi is the fourth type of combination and the uttaranga Dha, Ni being absent, may be the first, second and third type of combination. This scale therefore corresponds to the 1st, 2nd or 3rd Mela of the 4th Chakra and they are therefore, in the Chyuta Panchama Mela series, 91st, 92nd or 93rd scales.

6. The difficulty about a Chyuta Panchama Mela was cleverly obviated and solved by the Vidvan by tuning his side Sruti strings of the veena to the "Madhyama Sruti," i.e., Sa, Ma, Sa. This move of the Vidvan rendered his demonstration on the instrument very pleasing and satisfying to the ear. I may here mention and quote the opinion of the learned Sri B. Subbarao. He also mentions that the scales taking Chyuta Panchama

could be rendered very pleasant to the ear in the Madhyama Sruti. This Madhyama sruti as every one knows greatly modifies the whole colour or shade of the music played. Due to their inherent acoustic properties the three svaras Sa, Ma, and Ṡa together sound to our ears as Pa, Sa and Pa, the middle Ma getting augmented by the first order of combination difference tones and becomes dominant and takes the colour of the Tonic or leading note, while the two Sa's sound to us as two Pa's instead and the whole music appears lifted up in pitch by two and a half tones.

7. As a result of this modification following the use of Madhyama sruti, our scales now read as ;—

(i) Chatus sruti Dhaivata (Ḍhi) ;

(ii) Kaisiki Nishada (Ṇi) ;

(iii) Shadja (Sa) — the central svara ;

(iv) Suddha Rishabha (Ra) ; and

(v) Sadharana Gandhara (Gi).

In this scale the central svara is Sa and it is an Oudava scale, Pa and Ma both being absent. Also the two svaras Dhi and Ni are both in the lower octave (mandra sthayi) and the svaras Sa, Ra and Gi in the middle octave (madhya sthayi) and occur as such in the chant of the hymns. It is clear therefore that the Sama Veda recognises only the five svaras in ascending order of pitch Dhaivata, Nishada, Shadja, Rishabha and Gandhara. Ma and Pa must be certainly later additions to complete the Saptaka (the Gamut) in order to recognise and make use of the properties of the tonic (the Adhara svara - vadi), its octave and the intermediate notes having definite frequency values in relation to the tonic leading to the later well developed system of music. It will be interesting to mention here that in Western Music the notes are named from Dha onwards as A, B, C, D, E, F, G, for our svaras Dha, Ni, Sa, Ri, Ga, Ma and Pa respectively (not starting with A for our Sa) and showing their regard for the importance of tonic Sa in their system by having the middle C as the central note of their Grand Stave.

8. Now rewriting our five svaras derived above in ascending order of pitch we have :—

i. Shadja (Sa); ii. Suddha Rishabha (Ra); iii. Sadharana Gandhara (Gi); iv. Chatus sruti Dhaivata (Dhi); and v. Kaisiki Nishada (Ni).

This scale can be readily seen to be our present day 10th Mela, Natakapriya (Natabharanam) but without Ma and Pa. We have to conclude therefore that the music of Sama Gana Chant takes the svaras of this our present day Natakapriya Mela (10th) without Ma and Pa.

9. This conclusion is however at variance with what Sri Subbarama Dikshitar in his "Sampradaya Pradarsini" declares. In his description of the lakshana of 3rd Mela, Gana Sama Varali, he says that this 3rd Mela is derived from the music of Sama Veda and quotes Bharata, Matanga, Sarngadeva, Ramamatya and Venkata Makhi as his authorities. This 3rd Mela, Gana Sama Varali (Ganamurti) has the scale of svaras (i) Shadja (Sa); (ii) Suddha Rishabha (Ra); (iii) Suddha Gandhara (Ga); (iv) Suddha Dhaivata (Dha) and (v) Kakali Nishada (Nu) whereas Natabharana the 10th Mela has already mentioned Sa, Ri, Gi, Dhi and Ni. In both I have omitted mention of Varja svaras Ma and Pa.

10. From the above detailed discussion we arrive at the conclusion that Sri Pichumani Iyer plays the Sama Veda Hymns using the svaras of our present day 10th Mela, Natakapriya, completely omitting Ma and Pa (Pa touched in one or two instances only a short end svara as already mentioned); whereas Sri Subbarama Dikshitar quotes ancient authorities and declares that Sama Gana uses the svaras of the 3rd Mela, Gana Sama Varali (Sama Gana Varali ?) or Ganamurti. I leave this discussion at this point and request the learned Vidvans and scholars to ponder over the subject and do further research in the same and if possible try to render these passages on veena using the Gana Sama Varali svaras and compare the results of such an attempt with what has already been achieved by Vidvan Sri Pichumani Iyer.

SRI LINGAPPA'S COMPOSITIONS

ஸ்ரீ லிங்கப்பா அவர்களின் பழங்கீர்த்தனைகளும் இசை நுணுக்கங்களும்

Sri V. Ramachandra Naidu

1. சீர்மிகுந்த இந்நாட்டில், கண்ணன் திருஅவதார காலத்தில் வாழ்ந்தவர்கள் எல்லோருமே, தம்மை மகா பாக்கியவான்களாகக் கருதிக்கொண்டு, பரமானந்தமடைந்து, கண்ணனைக் கண்டுகளிக்க துவாரகை சென்றதாக ஸ்ரீமத் பாகவதத்தில் கூறப்படுகிறது.

இவ்வாறே இந்நாட்டில் கர்னாடக ஸங்கீதத்தை நிலை நாட்டிய மும்மூர்த்திகளாய் விளங்கும் ஸ்ரீ ஸத்குரு தியாகராஜஸ்வாமிகள், ஸ்ரீ முத்துஸ்வாமி தீக்ஷிதர், ஸ்ரீ ஸ்யாமா சாஸ்திரிகள் முதலானோர் வகுத்த கர்னாடகஸங்கீத மரபு கெடாமலும், அவர்கள் காலத்திலேயே வாழ்ந்து, பண்டைக்கால முறைப்படி ஸங்கீத ஸம்பந்தமான பாடல்கள் இயற்றிய, தெரிந்தும் தெரியாததுமான மஹான்கள், அவ்வளவு பேர்களும் பாக்கியசாலிகளே.

இவர்களுள் ஸ்ரீ லிங்கப்ப நாயுடுகாரு அவர்களும் ஒருவராவர். இவர்கள் எங்கள் மூதாதையரும், எடமணல் எஸ்டேட்டின் ஸ்தாபகருமாவார். இவர்கள் காலம் 1800—1871 என, இவர்கள் எழுதி வைத்திருக்கும் வார்சு சாசனத்திலிருந்து நிர்ணயிக்கப்படுகிறது. ஆகையால் சத்குரு தியாகராஜஸ்வாமிகள் காலத்திலேயே வாழ்ந்தவர்கள் இவர்கள். இவர்கள் செய்த கீர்த்தனங்கள் யாவும் பழைய கீர்த்தனங்களேயன்றி புதுமை அன்று.

இப்பெரியார் 200க்கு மேல்பட்ட கீர்த்தனைகள், வர்ணம், பதம், போன்ற ஸங்கீத உருப்படிகள் செய்திருப்பதாகக் கூறப்படுகிறது. இதற்கு ஆதாரம் காங்கேயபூஷணி - சாமாராகக் கீர்த்தனைகளில் உள்ளன. அவைகள் பின்வரும் வாக்கியங்களில் காணலாம்:

1. "பாலவிக்ருதி வனமால, ஆச்ருத சால நின்னு
   சதா பொகடு சுன்ன,"
2. "பால லோசனப்பிரிய பக்தவத்ஸல
   மீது சால பாடின வானீ."

இவர்கள் இயற்றிய யாவும் ஓலைச்சுவடியிலிருந்து, அச்சிடக்கொடுத்து மறைந்துள்ளன எனக்கேழ்வி. பல காலமாகிவிட்டதால், தற்போது புஸ்தகரூபமாக வெளிவந்துள்ள 12 உருப்படிகளும் கர்ண பரம்பரையிலிருந்து மறைந்துபோகும் தறுவாயில், – சில தெலுங்கு பதங்கள் பாடாந்தரத்தில் சிறுபிழை ஏற்பட்டதே தவிர – மற்றவை உருக்கெடாமல் பழைய பாடம்படியே இருந்திருக்கின்றன.

பாடல்கள் இவருடையதுதான் என நிர்ணயிப்பது, மூன்று அல்லது நான்கு வழிகளைக்கொண்டு கண்டுபிடிக்க முடிந்தது.

(1) "வெரும் கோசலராமா, கோசலாதிபா," என்பன போன்ற பதங்கள் இவர்கள் முத்திரையாக அமைந்திருப்பது மட்டும் கொண்டு, இப்பாடல்கள் இவருடையதுதான் எனச்சொல்வது இரண்டாம் பக்ஷம் சாக்ஷியமே.

(2) இத்துடன் பெரியோர்களின் வாயிலாக இவர்களின் வாழ்க்கையைக் கேட்டு, அதன் குறிப்புகளையும், சந்தர்ப்பங்களையும் சேர்த்து ஒத்திட்டுப் பார்ப்பது வெளிப்புற சாக்ஷியமாகும்.

(3) இவர்கள் பாடல்களைப் பெரியோர்கள் வாயிலாகக் கேட்டு, எழுதி வைத்துக்கொண்டு, அதில் பாடலாசிரியர் ஆங்காங்கு சொல்லியிருக்கும் சுயசரிதையையும் அவர் அனுபவங்களையும் கூர்ந்து கவனித்து, மேற்சொன்னவைகளுடன் ஒத்திட்டு பார்த்த பிறகே, சந்தேகமற இவர்களுடைய பாடல்கள்தான் இவை என நிர்ணயிக்க முடிந்தது.

(4) தற்போது இவர்களுடைய பாடல்களின் அமைப்பு நன்கு விளங்கியுள்ளதால், இனி எவ்வளவு பாடல்கள் கிடைத்தாலும், அவை இவர்களுடைய பாடல்கள் தான் என திட்டவட்டமாகக் கூறலாம்.

இப்பாடல்களும் பெரும்பாலும் பிறதிவருஷம் மார்கழி மாதத்தில் ஒவ்வொருநாளும் எங்களவர் பஜனை மடங்களில் பாகவதர்களால் பாடப்படும் ஹரிகதைகளில் இடம்பெற்றும் வந்திருக்கின்றன. இப்பாடல்களைப் பாடம் செய்த பெரியோர்களின் எண்ணிக்கை குறையக் குறைய, பாடல்களின் எண்ணும் குறைந்து குறைந்து, தற்போது இப்பனிரெண்டு பாடல்களே, நான் 1960-ல் இவர்களின் பாடல்களைத் தேடத்துடங்கியதின் பயனாக, கிடைத்துள்ளன.

பல பெரியோர்களின் வாயிலாகக் கேட்டு அப்பெரியோர்களின் கையெழுத்துப் பிரதிகளைச் சேகரித்து, அவர்கள் குறிப்பிட்ட ரகங்களில் மெட்டமைத்து, ஸ்வரப்படுத்தி இருக்கிறது.

பல ஆண்டுகளாகிவிட்டதால், பலரும் பலவிதமாய்ப் பாடி வந்திருக்கலாம். ஆனுல் எனக்குக் கிடைத்த பெரியோர்களின் ராகதாள பிரதிப்படியே இவைகளுக்கு மெட்டமைத்து ஸ்வரப்படுத்தப் பட்டிருக்கின்றன.

6 தெலுங்கு, 5 தமிழ், 1 பதம், ஆக 12 பாடல்களைப் பார்வையிட்ட, எங்கள் குடும்ப நண்பரும் ஆச்சார்ய ஸ்வாமிகளுமான திருனகிரி எம்பார் ஸ்ரீ சடகோபாச்சாரியார் அவர்கள், இக்கீர்த்தனைத் தொகுப்புகளுக்கு, ஒவ்வொன்றும் நவரத்தினங்களாக ஜ்வலிப்பதால் இதற்கு, 'நவரத்தின கீர்த்தன மாலா எனப் பெயரிடவேண்டும்' என்று அபிப்ராயம் தெரிவித்ததால், அவ்வாறே இப்பாடல் புஸ்தகத்துக்கு பெயரிடப்பட்டிருக்கிறது.

இனிய தெலுங்கிற்கு இனிமை தந்தவர் ஸ்ரீ தியாக ராஜஸ்வாமிகள், இனிய ஸம்ஸ்கிருதத்திற்கு இனிமை அளித்தவர் ஸ்ரீ தீக்ஷிதர். ஸ்ரீ லிங்கப்பா அவர்கள் இவ்விருவரின் வழிகளை கடைப்பிடித்து தெலுங்கும் ஸம்ஸ்கிருதமும் கலந்த மணிப்பிரவாள நடையில் தம் கீர்த்தனைகளை மிகவும் இனிமையாக்கி இருக்கிருர்.

இப் பாடல்கள், ஸம்ஸ்கிருதம் தெலுங்கு பழந்தமிழ், இம்மும் மொழிகளிலுமுள்ள கானரஸ சொற்கள் சொற்சுவை பொருட்சுவை நிரம்பி, தெலுங்கு கீர்த்தனைகள் மணிப்பிரவாள நடையிலும், உயர்ந்த தாளக்கட்டுடனும் இருப்பதைக் காணலாம்.

"வாளரக்கி", "தாளாற்சிலே" "வெறகமிழ் வரநதி" "அண்டர் விடுமழை" "கொண்டல்" என்பன பழந்தசிழ் சொற்களில் சிலவை.

இப்பாடல்கள் பண்டைய பண்பாட்டின் தன்மையுடையதை, மிகத்திறமையுடன் மெட்டமைத்து, நல்ல முறையில் ஸ்வரப்படுத்தித் தந்திருக்கும் ஸங்கீத வித்வான் ஸ்ரீ S. கல்யாணசுந்தரம் பிள்ளை, இப்பாடல்களின் தாள சூக்ஷமத்தைப் பற்றி எழுதியிருப்பதை இங்கு குறிப்பிடுகிறேன்.

"உதாரணமாக இப்பாடல்கள் லயத்தில் இணையும்போது, 'சத்துருவிகர,' என்னும் ஸாவேரி கீர்த்தனத்தின் சரணத்தின்

பிற்பகுதி, ‘திவ்யரத்தின,’ என்று கூறும் வார்த்தையின் பாடல் இலக்கணப்படிப் பார்த்தால், “தி[1] வ[2] ய[3] ரெ[1] த[2] ன[3],” என 6 அக்ஷரங்கள் கொண்ட சொல்லாகும். அவை இப்பாடலில் அமையும் போது, “தி[1]வ்ய[2] ரெ[1]த்ன[2],” என்று 4 அக்ஷரங்களில், அன்வய மேலீட்டால் இணைந்துள்ளது காணலாம். இவ்வித லய வின்யாஸங்கள் இவர்கள் பாடல்களில் பல இடங்களில் அமைந்துள்ளன.” “உன்னையல்லால்” என்னும் பந்துவராளி கீர்த்தனையின் சரணத்திலுள்ள தாளத்துடிப்பையும் பாடும்போது கவனிக்கவும்.

ஆகையால் ஸ்ரீ லிங்கப்பாவின் கீர்த்தனைகள், பார்ப்பதற்கு சொற்கள் நிறைந்து காணப்படினும், பாடும்போது அவைகள் இசையுடன் பாவம் இணைந்த லய வடிவங்களாகவே இருப்பது தெரிந்து கொள்ளலாம்.

இதுவும் அவர்களின் சங்கீத திறமைக்கு ஒரு சான்று.

இவர்கள் க்ஷத்திரிய குலத்தில் உதித்தவர் என்பதற்கு, இவர்கள் கீர்த்தனை மூலியமும் ஆதாரமிருக்கிறது.

மணிரங்கு ராக கீர்த்தனையில், “என்னால் செய் கர்மம் வெகுவாக இருக்க,” என்பதைக் காண்க. முதல் இரு குலத்தவர்களுக்கே கர்மங்கள் உண்டு. இக்கீர்த்தனையில் உள்ள மூன்று சரணங்களிலும், “ஒரு க்ஷத்திரியன் செய்யவேண்டிய கர்மங்கள் என்னவென்றும், அவைகளைத்தான் செய்யத் தவறியதற்கு மிக வருந்துவதையும்,” காணலாம்.

திருனகிரி ஸ்ரீ கல்யாண ரங்கநாதரைக் குறித்துப் பாடிய இப்பாடலில், முக்யமாக,

“உருமையுடன் உனது திருவடிகளில் சற்றும் நறு மலர்தனைக் கொண்டு வணங்கிப் பணிந்தறியாத,” என்றும்,

“சாதுக்களோடுறவாடித் தெளிந்ததில்லை,” என்றும்,

கேதாரகௌள கீர்த்தனையில், “வேதாகமமு வினவராலேது,”

ஸ்ரீ கிருஷ்ணவதாரத் தமிழ் கீர்த்தனையின் அனுபல்லவியில் “பன்னு நான்மறை, இசைத்துன் திருவடியை, பக்தி செய்து, புணிந்து வணங்காமல்,” என்பதன் மூலமும்,

தன் க்ஷத்ரிய தர்மங்களில் சிலவைகள் இவை என நினைவுறுத்தியிருக்கிறார்.

மேலும் இதிலிருந்து கர்ம மார்க்கமும், பக்தி மார்க்கமுமாகிய இவ்விரு சாதனங்களும் இறைவனை அடைய இன்றியமையாதது என்று வலிவுறுத்தியிருப்பதைக் காணலாம்.

இக் கீர்த்தனைகளின் மூலமும் மற்ற கீர்த்தனைகளின் மூலமும், இவர் பணமிகுதியால் இவர் வாழ்நாளில் முற்பகுதியை, தெய்வ சிந்தனையின்றி இவ்வுலக இன்பங்களில் மூழ்கிக் கழித்தார் எனத் தெரிகிறது.

இவரது வாழ்க்கை விவரம் பூராவும், நவரத்ன கீர்த்தனமாலாவில் எம்பார் ஸ்ரீ சடகோபாச்சாரியார் முன்னுரையிலும், பதிப்பாச்சாரியார் உரையிலும் காணலாம்.

இவர் இவ்வுலக மாயையில் மதிமயங்கி இருக்கும்போது, எம்பிரான் முன் வினைப்பயனால் இவர் உள்ளத்தைத் தன்னிடம் இணைக்க எண்ணி, லிங்கப்பர் குடும்பத்தில் பலசோதனைகளை நடத்தத் துடங்கினார் இறைவன்.

துயர் உறவே இவருக்குக் கடவுள்பால் வெறுப்பு அதிகரித்து, 'மதியால் விதியை வெல்லலாம்,' என்ற ஆணவமும் சேர, அவனை மறந்தார்.

மேலும் உடற்பிணியும் பற்றிடவே, லிங்கப்பருக்கு "இறைவனிடம் நாம் எம்மாத்திரம்?" என்ற நல் உணர்வு உதித்து, வெறுப்பு விருப்பமாக மாறி, தான் கற்ற இன்னிசைப்பயனால், அக்காலப் பண்புப்படி பாடல்கள் இயற்றி, தானும் பாடி இறைவனைத் தொழும் பணியில் ஈடுபட்டார்.

ஸாமா, ஸாவேரி, ராகவர்த்தனி கீர்த்தனைகளில் இவர்கள் மனம் உருகி, தெய்வத்தின் அருள்கொண்டு பாடி இருப்பதைக் காணலாம்.

ஷெ பாடல்கள் சுவைதரும் எதுகை மோனை இவைகள் நிரம்பி, அழகுள்ள எளிய நடையில் அமைந்துள்ளன. ராக தாளங்கள் ஒருபுறமிருக்க, பாடல்களின் அடிகள் முத்துச் சரங்கள் போன்று அமைந்திருப்பது இறைவன் அருளின்றி முடியுமா என்று சற்று யோசித்துப் பாருங்கள்,

உதாரணம்

"தீருனி, துரிதவி தூருனி, நிகமவி
சாருனி, யதுகுல வீருனி, நந்தகு
மாருனி, நவநீத சோருனி, வல்லபி
சாருனி ஸ்ரீமனோஹருனி மதினுஞ்சி,"

என்று சாவேரி ராக கீர்த்தனையில், இனிமையாக அமைந்துள்ளதைக் காணலாம். (பாடும்போது இந்த இடத்தைக் கூர்ந்து கவனிக்கவும்).

இதுவும் ஸ்ரீ தீக்ஷிதர் "சேத: ஸ்ரீ பாலகிருஷ்ணம்" கீர்த்தனம் போன்று மிகவும் அருமையாகவுள்ளது.

இவ்வாறே இவர்கள் இயற்றி இருக்கும் ஒவ்வொரு கீர்த்தனையும் கேட்போர் மனம் இறைவனிடம் ஒன்றி, நெஞ்சமுருகி, இசை இன்பமும் பாவமும் தந்து, புளங்காங்கிதம் அடையும் வகையில் உள்ளன.

இவர்கள், "நந்த நந்தனுடு, மாகு தெய்வமு ஓ சாதுலாரா," என்ற மத்யமாவதி கீர்த்தனையில் மிகவும் விநயமாக, நம் எல்லோரையும், "ஓ சாதுக்களே," என்றழைத்து "எங்கள் குலதெய்வம் கண்ணனேதான்," என்ற பல்லவியுடன் ஆரம்பித்து, கண்ணனின் திவ்யசரிதையை மூன்று சரணங்களில் கூறி இருக்கும் அழகை எப்படிச் சொல்வது! பாடிக்கேட்டால்தானே அனுபவிக்க முடியும்.

இதேபோல், இவர்கள் செய்திருக்கும் கிருஷ்ணாவதாரக் கீர்த்தனையும், தமிழ் ராகமாலிகையிலிருப்பது தெவிட்டாத இன்பம் தருகிறது.

ஸ்ரீராம கிருஷ்ணாதிகளின் ஸத்குணங்களையும், அவர்களின் அவதார ரகஸ்யத்தையும், ப்ரதாபங்களையும், தன்சொந்த அனுபவங்களையும், இவர் பாடல்களின் லக்ஷியமாக வைத்திருப்பது காணலாம்.

'சுருங்கக்கூறி விளங்கவைத்தல்,' என்ற முறையும் இவர்கள் கீர்த்தனையில் காணப்படுகிறது.

1. ஸ்ரீ ராமாவதாரத்தின் விசேஷணம், "தர்மஸத்தியமு கைகொன்ன கௌஸல்ய ராமா," என்று கீர்த்தனுரூபமாகக் குறிப்பிட்டிருக்கிறார்.

2. பின்னர் ஸ்ரீராமாவதாரத்தின் ரகஸ்யத்தை, ராகவர்த்தனி கீர்த்தனையில், சம்பூர்ணமாகக் கூறியிருக்கிருர்.

3. இவ்வாறே ஸ்ரீ கிருஷ்ணுவதார மஹிமையும், அவர் பாடல் களில் காணப்படுகிறது.

இவர்கள் கீர்த்தனைகளின் அமைப்பு மூன்று சரணங்கள்கொண்ட தாக உள்ளது. அது அக்காலத்தில் விஸ்தார முறையில் ஸங்கீதக் கச்சேரிகள் செய்வதற்கு 'உதவுபடி' என நினைக்கின்றேன். ஆனுலும் இவைகளில் சில ஒரு சரணம் மட்டும் பாடினுலும், நிறைவு காணும் வாய்ப்புள்ளதாய் இருக்கின்றன. விரும்பிப் பாடுவோர் எல்லா சரணங்களையும் பாடினுலும், இனிமை குன்ருமல், கேட்போர் மனம் இறைவனிடம் ஒன்றுவதாக அமைந்துள்ளன.

"வந்தனமு சேதரா," என்னும் கமாஸு ராக கீர்த்தனம், ஸ்ரீ சுவாமிகளின் திவ்யநாம கீர்த்தனை முறையில் அமைந்துள்ளது.

'நீ பாதமு,' என்னும் காங்கேயபூஷணி கீர்த்தனையை சற்று கூர்ந்து கவனித்தால், பல்லவி அந்த ராகத்தின் ஆரோஹ அவரோ ஹணங்களை அடிப்படையாகக்கொண்டு, ஸ்ரீ சாஸ்திரியார் கீர்த்தனை யைப் பின்பற்றியும், ஒவ்வொரு கீர்த்தனையின் சரணத்தின் பிற்பகுதி கள் ஸ்ரீதீக்ஷிதர் அவர்கள் கீர்த்தனை போன்றும் பரிமளிக்கிறது.

இன்னெரு விசேஷமும் காங்கேய பூஷணி கீர்த்தனையின் அநுபல்லவியில் கவனிக்கலாம்.

அநுபல்லவியில் முதல் அடி "பாப பங்க சுபாங்க, பக்ஷிராஜ துரங்க" என்று அழகாக ஸம்ஸ்கிருதத்தில் அமைந்திருக்கிறது. இரண்டாவது அடியில் ந்ருஸிம்ஹாவதாரத்தையும், கிருஷ்ணு வதாரத்தையும் அழகாக தெலுங்கில் "கோபரூப வேஷ, கோபால குல பூஷா" என்று அமைத்திருப்பது ஸ்வாமிகளின் வழியையும், ஸ்ரீ தீக்ஷிதர் வழியையும் பின்பற்றி இருக்கிறது.

அக்கீர்த்தனைகளைப் பாடுவோர்களாலும் கேட்பவர்களாலும், நிதர்சனமாய் உணரக்கூடியதாய் அமைந்துள்ளன. பாடும்போது இந்த இடத்தைக் கவனிக்கலாம்.

மும்மூர்த்திகளின் இசைவெள்ளம் ஜீவநதிகள் போன்றதாகும். இப்பெரியாரின் பாடல்கள் உபநதி போன்றதுமாகும். இந்த உப நதியும் ரஸிகர்களின் உள்ளத்தில் பாய்ந்து, இசைப் பயிரைத் தழைக்கவைத்து ஓங்கிவளரச் செய்யும் தன்மையுடையது என்று,

என் சிற்றறிவுக்கு எட்டியதை மிகவும் தாழ்மையுடன் தெரிவித்துக் கொள்கிறேன்.

இப்பெரியார் இவ்வாறு அரிய பாடல்களை இயற்றி, இறைவனைத் தொழுவதைத் தன் பணியாகக் கொண்டு, எஸ்டேட் நிர்வாகத்தைத் தனது அடுத்த வார்சுக்கு ஒப்படைத்துவிட்டு, ஸ்ரீ ஆண்டாள் திருப்பாவையில் அருளியபடி, வடமதுரைக் கண்ணனை தூமலர் தூவித்தொழுது வாயினுற்பாடி, மனதினுல் சிந்திப்பதையே தன் பணியாய்க் கொண்டு, தன்னை நாயகியாகவும் இறைவனை நாயகனுகவும் பாவிக்கும் மெய்ஞானம் பெற்று, திருநகிரி ஸ்ரீ கல்யாணரங்கனுதன், சீர்காழி ஸ்ரீ தாடாளப் பெருமாள், திருமங்கை மன்னன் இவர்கள் ஸேவா கைங்கர்யங்களில் ஈடுபட்டு வந்தது பற்றி எம்பார் சடகோபாச்சாரியார் கூறியிருப்பதை இங்கு தருகிறேன்.

ஸ்ரீ லிங்கப்பா ஆழ்வார் ஸன்னதி நிர்வாகத்தோடு, ராத்திரியில் ஏகாந்தத்தில் வாசா கைங்கர்யம் பண்ணி அனுபவித்து வந்ததாகப் பெரியவர்கள் சொல்லக் கேட்டிருக்கிறது. அதாவது ப்ரும்மோத்ஸவ காலங்களில் ராத்திரி புறப்பாடு ஆனபிறகு வாகன மண்டபத்திலிருந்து படிகளைந்து திருக்கைத்தலத்தில் எழுந்தருள்கிற புறப்பாட்டில் தாம் ச்ருதியுடன் மெய்மறந்து பாடுவார்களாம்.

நாளைக்கும் வாகன மண்டபத்தில் எழுந்தருளி, திரை சமர்ப்பித்தவுடன் மத்தளம் தாளம் சேவிப்பது (நிசப்தம் நிலவுவது) வழக்கமாக இருந்துவருகிறது. இதற்குக் காரணம் ஒரு சமயம் பெரியோர்களைக் கேட்டதற்கு, "ஸ்ரீமான் எடமணல் லிங்கப்ப நாயுடுகார் இக்காலங்களில் பாடுபவர்களாம்: அந்தக் காலம் முதற்கொண்டு இந்த வழக்கம் மட்டும் இருந்து வருகிறது," என்று சொன்னுர்கள்.

சமீபத்தில் எம்பார் ஸ்ரீ சடகோபாச்சாரியார் சுவாமிகளைச் சந்தித்தபோது, லிங்கப்பா அவர்களின் இன்னும் சில ஸாகித்யங்கள் மறைந்து, அவர்கள் பாடிய காலங்களில், நாட்டக்குறிஞ்சி, ஆநந்த பைரவி போன்ற சில ராகங்கள் மட்டுமே இசைக்கப் படுவதாகக் கூறினுர்கள்.

'அடியார்க்குமடியார்,' என்னும் வைஷ்ணவ சித்தாந்தத்தின் படியும், தன்னை நாயகியாகவும் மனதில் கொண்டு, 'மாதே கேளடி,' என்னும் ஒரு சிங்கார ரஸம் ததும்பும் பதம் ஸகாண ராகத்தில் இயற்றியுள்ளார்கள். இது கேட்பதற்கு மிகவும் இனிமையாக உள்ளது.

இவ்வாறு பாடல் இயற்றும் திறமை தெய்வத்தின் அருளின்றி முடியுமா ?

இப்பெரியாரும் மற்ற மஹனீயர்கள் போலவே தம் ஆத்ம திருப்திக்காக ஏகாந்தத்தில் பாடி அவன் அருள்பெறவே, இவ்வாறு கீர்த்தனைகள் இயற்றியதாகத் தெரிகிறது.

ஆகையால் இக்கீர்த்தனைகள் எல்லாம் கிடைத்தற்கரிய அபூர்வ கீர்த்தனைகளே, நவரத்தினங்களே.

இவ்வாறு சதா இறைவனைத் தொழுவதே தம் பணியாகக் கொண்டு, 71 வயது வரை இங்நிலவுலகில் கர்மயோகியாக திகழ்ந்த தொரு மகானின் புண்ய சரிதையைப் பற்றியும், அவர்கள் இயற்றிய பாடல்களின் இசை நுணுக்கங்களைப் பற்றியும், கட்டுரை எழுதி இந்த வித்வத் ஸபையில் வாசிப்பதற்கு வாய்ப்பளித்த, வித்வத்ஸபை தலைவர் அவர்களுக்கும், இந்த ஆண்டு ஸங்கீத விழாத் தலைவர் அவர்களுக்கும் எனது நெடுங்கால நண்பரும் இச்சபையின் முக்கிய காரியதரிசியுமான டாக்டர் ராகவன் அவர்களுக்கும், அவர்கள் ஸகாக்களான ஸ்ரீ T. V. ராஜகோபால், ஸ்ரீ ரங்கனாதன், ஸ்ரீ நடராஜன் அவர்களுக்கும் என் பரிபூர்ணமான நன்றியைத் தெரிவித்துக் கொள்கிறேன்.

இப்பெரியார் பாடல்களைத் தொகுத்து வெளியிடுவதற்கும், அடியேன் ஸ்ரீ வெங்கடேசுவர கீர்த்தனமாலா இயற்றி வெளியிடுவதற்கும், "கலியுகவரதன் ஸ்ரீ வெங்கடேசுவர பெருமானின் அருளும், ஸ்ரீ ஆண்டாளின் திருவுள்ளமும் தான் காரணம்," என்று நன்கு புரிந்துகொண்டு, அவர்கள் அடிபணிகின்றேன். கஜமுக வரதனையும் வணங்குகிறேன்.

புதைந்து, அடைந்து குலதனமாக இருந்த இக்கீர்த்தனங்களை ஒருவனுடைய தனி முயற்சியால் எவ்வளவு செய்யமுடியுமோ அவ்வளவும் செய்து நல்ல முறையில் வெளியிட்டுவிட்டேன். இந்த மஹாவித்வத் சபை தான் வித்யார்த்திகள் முதல் மஹாவித்வான்கள் வரை அவர்கள் பாடுவதற்கு ஊக்கமும், ஆக்கமும் அளிக்கவேணுமாய் விண்ணப்பித்துக் கொண்டு, இத்துடன் என் கட்டுரையை முடித்துக்கொள்கிறேன்.

DRUMS OF INDIA THROUGH THE AGES

S. Krishnaswami, A.I.R.

Drum playing is a great art in India and a large variety of drums are used for keeping time and providing rhythmic accompaniment to concerts of classical music, folk music, dance, devotional songs etc. Drums like the Mridanga, Tabla, Pakhawaj, Ghatam, Khanjira and Tavil are ideally suited for providing a cross rhythmical accompaniment whereas there are other rhythmical instruments like the Khartals, Chipla, Jalra, Kamsale, Chimta etc., which are used for giving just strokes of slow or fast tempo.

The highly developed drums like the Mridanga, Tabla and Pakhawaj, with their accuracy of pitch and variety of tone are musically very superior to similar instruments in any other country. Although these drums are usually accompanying instruments, good drummers very often given brilliant solo performances and they are by far the most important and independent part of accompaniment. They create, in terms of rhythm, variations on the theme which can be as rich and complex as the melodic variations.

The modern Mridanga, Tabla, Pakhawaj etc. and other percussion instruments that are currently used today, have descended from some very primitive instruments used by our ancestors several centuries ago. In fact each of the great families of drums and rhythmic instruments is well represented in those instruments which were devised by the primitive man. This we know from the study and researches that have been made into the life and activities of ancient peoples by modern scholars and historians.

In order to study the names and shapes of ancient drums, we have to examine various sources like literature, sculptural representations in ancient temples and monuments, iconographical study of the drums attributed to divinities and finally an ethnographical survey or a study of the social life, customs and manners of different castes, tribes and communities.

Varieties of drums and other percussion instruments are mentioned in the ancient Sanskrit treatises, Vedic literature, Buddhist

texts, Puranas and texts belonging to the medieval period. Here are some of the varieties of drums;

Mridanga	Muraja
Dhakka	Bheri
Dundubhi	Pataha
Pushkara	Mardala
Bhanda-vadya	Bhoomi Dundubhi
Dardura	Panava
Jarjharika	Damaru
Dindima	Muddama
Madduk	Pushkara-traya
Adambara	Vanaspati and many others.

Kalidasa and other Sanskrit writers compare the sounds emanated from the Mridanga to the different qualities of sounds produced by the rumbling of thunders, namely Vidyujjihvam, Airavanam, Kikila etc. The origin of the Mridanga, as described in the Puranas, is that Mahadeva, elated by his victory over the invincible demon Tripurasura, began to dance, surrounded by Indra and other deities. Brahma is said to have invented the Mridanga to serve as an accompaniment and under his direction, the God Ganesa performed.

References to the following drums are found in the Tamil Silappadikaram :

Perikai	Patakam	Idakkai	Udukkai
Maddalam	Challikai	Karadikai	Thimilai
Kudamuzha	Thakkai	Kanapparai	Damarugam
Thannumai	Thadari	Anthari	Muzhavu
Monthai	Nisalam	Thudumai	Chiruparai
Perumparai	Adakkam	Thakunicham	Viraleru
Pakam	Upangam	Thudi	Nazhikaiparai
Kanviduthoombu etc.			

We also find reference to Tyaga Murasu (charity drum), Nyaya Murasu (judgment drum) and Veera Murasu (martial drum). Panava, Dardura and Tripushkara or the three faced Bhandavadya were some of the drums used in ancient dramas and mentioned in literature.

The variety of drums depicted in the sculptures of ancient monuments at Bharhut, Mathura, Gandhara, Amaravati, Nagarjunakonda, Sanchi, Konarak, Chidambaram, Belur and various temples of north and south, is something astounding. There are cylindrical drums, barrel shaped drums, twin drums, triple drums, circular drums, pot drums, hourglass drums and kettle-drums. These sculptures belong to the period between the 3rd century B.C. and 12th century A.D. and their historical value is very great. Women are often mentioned in literature as playing the drum and we find a whole series of musicians playing various types of drums, cymbals and other instruments known to mediaeval India in the beautiful carvings at the Jagmohan mandap at Konarak and at the temple at Belur.

Three varieties of drums are usually represented in sculpture and these are the Ūrdhvaka, the Ankya and Ālingya. As the name indicates, the Ūrdhvaka is placed vertically and the top head played. Both the sides of the Ankya and Ālingya types are used and both the varieties are shown in Amaravati sculptures of the 2nd century A.D. Elsewhere we find two Ūrdhvaka drums placed vertically and one Ankya type horizontally and all the three played by a single drummer. The Ālingya type which is a small one is suspended by a strap from the shoulder and it is played very much like the Eḍakka of Kerala. The illustrations also show the konas or the drum sticks used for playing some of the drums.

Experts using all the information they can get, have decided that among the three main classifications of musical instruments namely the string, wind and percussion, the last named family is the oldest in existence and decidedly certain of its representatives among the instruments that we use today are the most primitive members of this community. The various types of percussion instruments possessing different qualities contribute much to the rhythm, colour and dynamic force of any combination with which they are associated.

Rhythm comes naturally, since all creation moves to it—the stars, the earth, the moon, the seasons and all growth; man's heart throbs rhythmically; in his movements his feet move in regularity. Rhythm is the oldest impulse of a man. Most pri-

mitive music is the strongest in its rhythmic element. Man expresses his emotional feelings by dance both when enjoying pleasure and also to appease the God whom he fears. The ceremonial dancing of the primitive man was a great outlet for his savage emotions. This basic impulse in him led him to create rhythmic instruments.

In the beginning, the simplest accompaniment to the dance was provided by the dancers themselves. They stamped their feet and clapped their hands to keep the rhythm and time. Sometimes they mark the rhythm by beating their chests, flanks and bellies with their hands. Some of the scholars say that very simple instruments such as rattles, scrappers and the slapping of various parts of the human body, have almost world distribution and thus may be the oldest instruments common to all men.

The clapping of the hands and other methods suggestive of rhythmic instruments led to the use of rude castanets of stones and wood. Wooden instruments are easily made and productive of higher results than stone.

The early man must have learned how to increase the sound of stamping by performing it on a flat piece of wood, a rudimentary plank instead of on the bare earth and later found how the result improved by digging a cavity underneath the plank. An instrument of this type is still found among the negroid pigmies in the Andamans. The legs which were used for stamping were replaced by stout sticks for beating over the planks. Sometimes pits were dug on the earth and covered with hide and beaten by long thick hammers. A kind of this type is the Vedic 'Bhoomi Dundubhi.' It was used at the Mahavrata ceremonies mentioned in the Samhitas and Brahmanas. Hollow trees were the first instruments provided by nature herself.

From the clapping of hands, there arose countless different types of clappers, beating sticks, cymbals etc., represented by kartals, chipla, danda or kolattam sticks, manjira, jhanj, jalara etc.

The beating of the flanks and bellies by the players was refined and the sound made louder by using a stick instead of the bare hand; and another stick, a tube or a flat piece of wood in

place of the performer's body. It must have been known that hollow objects make so much louder noise than solid ones and further smaller and shorter objects produce higher tones than larger and longer ones. Gradually the players must havc taken pleasure in the alternation of high and low sounds, at first however, without trying to obtain any particular pitch or tuning.

Side by side rattles were used, a contraption made of sounding materials such as nut shells, seeds or stones strung together or placed in a gourd container which when shaken by the player makes a sharp percussive sound. A kind of dance rattle used by the Chenchus of Hyderabad called Gilabada is made of dried sword-bean seeds and strung by a jungle fibre twine. The women carried this bunch and shook them to emphasise the rhythm during dances. At first these were suspended from the ankles or the waist of the dancer which responded to the movements with a sharp noise. Various sounds were tried on wood, stones and metals resulting in the use of Marcass, bells, gunghuroos or gejjai (ankle bells) etc., that produce clear metallic sound.

The production of sound by stretching and covering up an open wooden frame with a skin is a further development. The Khanjari, Dappu, Duff, Tambattam and all drums with an open frame are very simple in construction and it is easy to make one. There are endless varieties of these drums either played by hands or with sticks; from the noisy Pataha, Preta - Pataha, Pratah-kala-nandi-Pataha etc., to the sweet sounding notes of the classical Khanjira of the south, there are many subtle modulations in their sound. The Pratah-kala-nandi-Pataha was the auspicious drum sounded in the morning along with the Sankha to announce the break of day. The Preta-pataha was used in funeral processions. The fearful sounds produced by these drums were largely used by the ancients during war, ceremonies, festivals, processions etc.

Amongst the drums proper, the conical drums belong to the earliest class. The skin is stretched over a pot which serves as a resonator. Such drums were known all over India under various names such as Bheri, Dundubhi, Bhanda Vadya etc. surviving in the modern Nagara and its families. In the past these drums were occupying a place of honour. During the war, they were placed on the backs of elephants and played along with conches (shanks),

kahalas (pipes) etc., to inspire men and elephants with martial enthusiasm.

The Dundubhi, the war drum, had dominated the war music of India throughout its history. Mantras from Atharva Veda consecrated to the war drum indicate how it can render victorious the armies which it heralds. Before the battle, the drums are washed, then they put on ritual substance, then the purohits beat them three times and brandish them over the warriors and pray to the drum to defeat the enemy with its roaring voice, spread terror among the enemies and conquer them. No doubt amongst ancient people musical instruments were very strongly associated with the supernatural. Sometimes certain instruments are considered sacred. The role of instruments in ancient culture was not confined to music performance only. The instrments were ceremonial equipment, part of their religious paraphernalia; some of the instruments were thought of as having distinct personalities. It is the symbolic aspect of the instruments that gives them status of importance.

Nagara is used in religious worship and heads processions of temple deities. The drum is called Nakkara in the north and is one of the constituents of famous Naubat, the royal ensemble of the Moghul court. The Nakkar-khana of the Emperor Akbar comprised twenty pairs of Nakkaras besides other instruments.

It must be a little later that barrel-shaped drums covered on both sides with skin came to be used. Of the many varieties of the two-sided drums, two types are specially common and are more or less representative and they are the Dhol and the Mridanga. The Dhol and its varieties are usually heard during festivals, weddings and processions etc. The smaller varieties are called Dholak, Dholki and so on while the Dhak is a larger version.

In the development of the drums, perhaps big drums must have been found unwieldy and so portable drums were designed and these are represented by the Damaru which is an attribute of Lord Siva who is said to have played it in His cosmic dance. Huruk, Udukkai, Edakka, Budubudukke, Urumi, Davandai, Titti, etc., are some of the varieties belonging to the Damaru family. These small drums, shaped like an hourglass, flaring out above

and below a narrow central waist are more clearly designed to be carried in the hands and this type of drum is used all over India under various names.

The development from the ancient pot drum is the Panchamukha Vadyam, literally the five-mouthed instrument. The mouths are covered with stretched skin and the musician plays on them with both hands. Examples of this type of instrument are found at Tiruvarur and Tiruvanaikaval, both in Tamilnad. There is a sculpture in the famous temple at Chidambaram[1] where the Panchamukha Vadyam features along with two side drums. An early example of this type of drum belonging to about the third century B.C. has been discovered in the excavations at Rajgir in the north.

The northern Pakhawaj is generally called Mridang. There is also another drum belonging to Bengal and Manipur largely used for dance, kirtans and songs of devotional type which is called 'Mridang'. This instrument is made of clay and popularly known as Khol.

The Pakhawaj is almost similar to the southern Mridanga except for slight difference in construction and technique of playing. The left side is more or less the same in both the regions, but the right side, though designed on the same principle, is quite different in the distribution of the prepared parts. The quality of the leather as well as the tension of the surface are quite different. The cylindrical blocks of wood inserted between the braces and the wall of the Pakhawaj are bigger than those of the southern Mridanga. The main difference in the style of playing between the northern Pakhawaj and the southern Mridangam is that whereas the left side of the Pakhawaj is played with the open hand, southern musicians use the left side of the Mridangam in much the same way as Tabla players use the *bayan* or the left piece of the pair.

Although the Pakhawaj is a highly developed drum of the north, it has more or less been superseded in popularity by the Tabla. The use of the Pakhawaj is confined to severely classical types of compositions like Sadra, Dhrupad, Dhammar etc. It is also used for accompanying instruments like the northern Bin,

1. For a reproduction of this panel and a Note on it, see Dr. V. Raghavan, 'The Multifaced Drum', J. of the Music Academy, Madras. XXVI. 1954 pp. 107–8.

Sursinghar, Surbahar etc., when they are played in the traditional style. Pakhawaj was very popular during the Moghul period when it was used as an accompaniment to vocal music and to instruments like Bin and Rabab and also to dancing.

In the north the Tabla is the most widely used drum. The Tabla constitutes a vital part of Indian music especially in the north and no concert, either vocal or instrumental can take place without a pair of Tablas. The Tabla player does not have to adapt his time measure to the needs of the main artist. On the contrary, the main artist must take cognizance of the relentless beats of the Tabla which give a continuous and explicit version of the rhythm cycle or the Tekka of the Tabla the artist has chosen for his performance.

The Tabla can be conceived of as the Pakhawaj in two pieces: instead of being one drum with two heads, it is two drums with separate heads. The Tabla is believed to be one of the innovations of Amir Khusru who flourished in Delhi in the reign of Allauddin Khilji in the 13th century. Though the Tabla has been in use since the Muslims settled in India, it does not seem to have been used in the court music of the Moghuls nor do we find any mention of the Tabla in the mediaeval literature though the Mridanga finds constant mention. The Mridanga, being grave, suited the court music; perhaps the Tabla lacked the gravity necessary to accompany the type of music then prevalent. Had it been derived from the Pakhawaj, certainly it would have been mentioned in the medieval texts but being an accompaniment used by the women or used for the lighter type of music, it does not find any reference. Many hereditary Tabla players say that the Tabla originated in their families but long before the birth of Islam, a kind of drum called 'Tabl' has been a popular drum of Arabia which the Muslims must have brought to India.

The southern Mridanga is hollowed out of a block of wood and is almost cylindrical in shape with a slight broadening of the centre. There are separate Mridangas, low pitched or *taggu* sruti Mridanga used as accompaniment to male singers and the high or *hetchu* sruti ones used for lady singers, flute, Gottuvadyam etc. The length of the Mridanga varies from 1½ to 2 feet. The diameter of the two sides varies from 6¼ to 7¾ inches. The

broader central part of the Mridanga is from 10 inches to 11½ inches. The right head of the Mridanga is covered with three concentric layers of calf and sheep skin. The skins are fastened to leather hoops and tightened by leather braces; small cylindrical pieces of wood placed between the wooden body and the braces, the pushing of which helps in adjusting the pitch of the instrument.

In the centre of the right head there is a permanent fixture of a black paste called 'karanai' which is a composition of manganese dust and boiled rice or a composition of iron filings and boiled rice or a powder of a special type of stone 'Kittan' mixed with rice in a proper proportion. This black paste is applied on the centre of the right side in small grains and finely rubbed over for hardening with the polished surface of a stone. It is the loading of this black substance which gives the fine characteristic tone to the Mridanga.

Before the Mridanga is played, a paste of *rava* and water or boiled rice and ashes is temporarily applied on to the centre of the left head and this paste is scraped off at the close of the performance. The application of this paste reduces the pitch to a dull, booming bass sound.

There are two distinct styles of accompaniment; one is for the Mridanga player to follow the principal performer very closely, so much so we can find no difference between the construction of the music composition and the Mridanga playing. Perhaps the more traditional style is the style in which the Mridanga player does not attempt to follow the melody so closely but sometimes plays different cross rhythms of elaborate and intricate patterns and both come to a grand finale. In this way the full character of the particular tala is brought out.

In a South Indian classical concert, the Mridanga is used not merely as an instrument of accompaniment, but also as a solo instrument. Every recital of classical music will have a short solo interlude (tani āvartam) on the Mridanga. This usually comes after elaboration of the pallavi, the central piece of a music concert. Here the Mridanga player will improvise on the tala of the pallavi with particular attention to the construction of the

pallavi that went before. In fact the character of the improvisation is governed by the character of the pallavi.

Mridanga is also an important accompaniment to Bharata Natyam, Kutchipudi and other dances of the South. The footwork of the dancer is translated on the Mridanga. The different jatis played on the Mridanga blend admirably with the mudras, the various gestures and movements of the limbs and intricate footwork of the dancer produce wonderful effect.

In a South Indian music concert, besides Mridanga, other laya vadyas are also used like the Khanjira, Ghatam, Morchank, Dholak etc., and they are used as supplement to the Mridanga. In an ensemble of these percussion instruments popularly called 'Talavadya Katcheri', the performer is given individual opportunity to show his creative skill in playing most intricate and complicated rhythmic combinations which he is able to produce within the time measure (tala) chosen in the beginning; and in the end all the instruments are played simultaneously and come to a finale.

As regards the origin of the name 'Mridanga', there is still controversy amongst scholars. The general opinion is that originally the Mridanga was made out of mud or clay, hence the name 'Mridanga'. There are many drums in India which are made of clay like Khole, Madole, Gumot, Ghatam, Tasha, Timki etc., but according to Dr. V. Raghavan,[2] the name 'Mridanga' was originally applied to the drum called Pushkara by Bharata; the black karanai which is applied permanently on the right side of the Mridanga was, as he has shown, really mud or 'mrit', the fine bluish mud deposited on the river beds; it is the application of this mud that really gives the characteristic sound to the drum face and hence the drum is called after this essential 'anga' or ingredient which became 'Mrit-anga' or 'Mridanga',

Migration of musical instruments from ancient India to Turkestan, Khotan, Mongolia, China and Japan in the north and countries like Java, Cambodia, Bali etc., in the Far East Asian regions during the early centuries of our era is most interesting. Sculptural representations of certain types of drums depicted in

2. See his papers Why is the Mridanga so-called in the J. of the Music Academy, Madras, XXIV, 1953, pp. 135-6; XXVI, 19.5, p. 148.

Borobudur, Champa, Prambanam and other places confirm the existence of a migration of the music of India to these countries at an early period. The famous Borobudur is a veritable masterpiece of temple architecture and the greatest monument of Hindu-Javanese art. The sculptures describe the life and deeds of Buddha and the Jataka stories. The illustrations of musical instruments like Veena, flutes, pot drums and various types of drums show remarkable similarity to those found in India. In some of the Hindu-Javanese literature mention is made of Bangshi (transverse flute), Tala (cymbal), Panava (a kind of drum) and Mudduma (tinkling bells), Bheri, Murawa (or Muraja?) Sankha (conch), Kahala (trumpet) etc., and the names show their bearing a predominantly Hindu character.

The speaker then illustrated some of the drums with tape recordings of their sound effects.

Mridangam :	Bharata Natyam
Tabla :	Kathak dance
Chenda, Edakka and Maddalam :	Kathakali dance drama
Khol :	Manipur dance
Other drums :	Yakshagana of Mysore

Drums used in an AIR Talavadya Katcheri

Panchavadyam	Urumi	Kudukuduppai
Suddha Maddalam	Kidukatti	Huruk
Edakka	Udal	Dholak
Timila	Nagara	Khol
Chenda	Pambai	Kashmir drums
Kundalam	Udukkai	Karadi Majal

THAYAMBAKA

Sri L. S. Rajagopalan, Trichur.

The laya vinyasa done on the Chenda in Kerala is known as Thayambaka. The origin of the word Thayambaka is obscure. Some people explain it as Talam Vaka i.e. varieties of talam played on the instrument or as Talam Paka i.e., a fight with the talas. However the explanation of Sri Attoor Krishna Pisharodi seems to be the most appropriate. He says it is derived from Sthayam Vaka, that is varieties of sthaya. In the Sangeeta Ratnakara, 'Sthaya' is defined as "Ragasya avayavah Sthayah". Sthaya means sangantis. So the playing of various sangatis on the Chenda becomes Sthayamvaka which later became Thayambaka.

The name Chenda is probably derived from the sound it makes: Jham Da. The Chenda is a tall hollow cylinder covered on both sides with cow hide. The old specification for the cylinders is from the word Maram which in Ka-Ta-Payadi will be the figure 25 which is the length plus diameter (about $16\frac{7}{8}$ viral long and $7\frac{1}{4}$ viral diameter). The thickness of the wood is to be 4 to 6 Thoras.

8 Thora	=	1 viral (two finger spans)
24 Viral	=	28 inches.

The cylinder is usually of jack wood. A bamboo piece heated and bent into a circle and covered with leather is used as a ring at the top, and the bottom to hold the leather. Cow hide is used to cover the faces on each side. At the edge one piece of leather is added on for tying the tension strings. 12 holes are made and the strings (made of Vakka fibre) are passed through and tightened by movable tightening loops holding adjacent strings.

The left end has only one piece of leather but in the right end seven additional circular pieces of diminishing diameters are pasted on with a special gum on the inside. The pasting of these pieces gives it a booming sound. This right end is played only for tantric worship, when "Gods" are brought on the stage in Kathakali, for keeping time when playing Thayambaka

etc. Nowadays Chenda can be seen having metal fastening for keeping the tension.

When the Thayambaka is played the strings are tightened to give a higher sruti and while playing the *melams* in elephant procession a lower tension is given. The instrument can produce about seven tones when playing with the hand (left hand) Dhum and Dhom according to whether the strikig is with the flat palm or with the edge of the palm. Ta and Dhi sounds are heard similarly when the Chenda in sounded at the edge.

If a stick (in the right hand) is used, Du and Nnam sounds are heard when the middle and the edge are struck. When the portion in between the edge and the centre is struck the tone will be slightly different. More tonal effects, especially in Kathakali, are made by rubbing the leather with the stick or altering the tension on the leather with one hand while playing with the other. No fingering however is done when playing the Chenda.

Thayambaka is done usually at night only. After Deeparadhana etc., in the evening the deity is brought out and kept in a Mandapa and Thayambaka is played as an offering. Before starting the actual Thayambaka a piece known as Sandhi vela is rendered on the right end of the Chenda in Eka Talam. At the finish of Sandhi vela playing (usually done by some assistants) the leader starts the Thayambaka. The Thayambaka is done only in Chempata Tala which is equal to the Adi Tala of Carnatic Music.

One man (the leader) plays the vinyasa using his left palm and a stick in the right hand. There will be two Chendas keeping time beating on the left or tension end. Two more will be keeping time beating on the right end. Two or three cymbals will also be keeping time.

The playing lasts 1 to 1½ hours. It is in 5 stages: Pati kalam, Kooru, Iḍavaṭṭom, Iḍanila, Irikiḍa.

Pati kalam is slow tempo. The tala beats are done as

1.	2.	3.	4.	5.	6.	7.	8.
Nnam	Nnam	Nnam	Dhim	Nnam	Dhim	Nnam	Dhim

The Pati kalam is in chaturasra nata and it is played in three or four increasing tempos. However, the tempo is not on the pattern of Vilamba, Madhyama and Druta Kalas of Carnatic music. They slowly increase the tempo as in the pattern of singing Namavalis in Bhajana. Pati kalam is played for about half an hour. Then Kooru is played. Kooru playing is only playing of different Natais, Tisram (Panchari Kooru), Khandam (Chempa Kooru), Misram (Adanta Kooru). It is to be noted that Panchari tala is Rupaka tala of 6 Matras, Chempa tala is Jhampa tala of 10 Matras and Adanta tala is Ata tala of 14 Matras.

When Chempa Kooru and Adanta Kooru are played the mode of keeping time is changed though the basic Chempata tala is maintained.

This change of mode of time keeping will make it appear that the playing is on a different tala though actually only a different Natai is played. This is another difference in the Kerala system of playing laya vinyasa, from the Carnatic system.

For Chemba Kooru the tala is as follows:

1 Nnam Nnam Nam
2 Nnam Nnam Nnam
3 Nnam Nnam Nnam
4 Nnam Nnam Dhim
5 Nnam Nnam Nnam
6 Nnam Nnam Dhim
4 Nnam Nnam Dhim
8 Dhi Dhi Dhim

For Adanta Kooru the tala is kept as follows:

1 Nnam Nnam
2 Nnam
3 Nnam Nnam
4 Dhim
5 Nnam Nnam
6 Dhim
7 Dhi Dhi
8 Dhim

Kooru playing lasts about twenty minutes. This is also done in increasing tempos.

The Iḍavattam is played for about five minutes. The tala is kept:

Dhim Nnam Dhim Nnam Dhim Nnam etc. etc.

Then the Iḍanila is played, the time keeping being done as

Dhim Dhim Dhim

After about ten minutes of this, the last very fast tempo Irikiḍa is played for ten minutes.

As already mentioned the peculiarities of the Kerala system of laya vinyasa is that the tempo of playing is slowly increased. The time keeping Chenda must also automatically increase the tempo of their time keeping accordingly. While different Natais are played a different mode of time keeping is adopted suitable to the Natai.

The vinyasa is done only in Chempata or Adi tala.

While with a bit of practice it should be possible to do laya vinyasa on other talas also, it is not known why it is not done. It should however be mentioned that in Kathakali, before the start of the play, there is a Mela Pada in which the Chenda and the Maddala do laya vinyasa in Jhampa tala (Jhampa of 10 Matras).

Thayambaka can be played on other instruments also. It is done on a wooden bow which is popular.

Laya vinyasa on the Maddalam is known as Maddala Pattu and that on the Kombu is Kombu Pattu. Though they are also delightful to hear they are not elaborated like the Thayambaka on the Chenda. Thayambaka can be heard during most temple festivals.

Thayambaka is taught by first reciting the Vayattari (*sol kattu*). Young persons are given regular training for playing it.[1] Once this is learnt, they learn the playing of other melams etc. Some special techniques are required in playing Chenda in Kathakali and this is taught separately but the first lessons are Thayambaka.

Of late, some innovations like giving some special sound effects are done in Thayambaka but this is looked upon with disfavour by the older generation.

This laya vinyasa of Kerala has a definite message for connoisseurs outside the region and it augurs well for the art that an august body like this Music Academy is taking interest in it.

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[1] The trainee first practises certain set pieces by beating on a rock or wooden piece with a thick heavy stick in the hand. The practice with the heavy stick enables him to do the actual playing with the light stick on the drum daily.

In olden days there used to be a method of practice known as Nilavirikkal (sitting in moon-light). After the new moon day the student is to practise for the duration of the moonlight. So from about an hour on the 1st day (Prathama) the period of practice increases to 12 hours on full moon day and then it reduces daily to nil on next new moon day.

THAYAMBAKA (Laya Vinyasa) on the CHENDA (Drum)

BY

SRI TRITALA KESAVA PODUVAL AND PARTY

Demonstration on the Edakka and Sopana Music by

SRI TIRUVEGAPPURA RAMA PODUVAL

(father of Sri Tritala Kesava Poduval)

Explanation by

SRI L. S. RAJAGOPALAN OF TRICHUR

Sri Rama Poduval is one of the few persons who know the various aspects of drumming for tantric worship in Kerala temples. He is sponsoring the starting of a school for Kshetra Kala in Kerala.

A Brief Survey of the Tala Vadyas of Kerala

In the development of Musical Instruments in Kerala the Tala Vadyas have far outstripped other instruments. While there does not seem to be any musical instrument for melodic music indigenous to Kerala (barring perhaps the Pulluvan's fiddle-like instrument) the number and types of Tala instruments are so many and varied. All these Tala Vadyas are connected with the temples in one form or other and even the folk instruments have a folk-ritual background. The method of playing these instruments is also peculiar to Kerala.

Bhadra Kali (or Durga) temples can be seen in almost every village of Kerala and these Kali temples are said to be older than temples of other Gods of the Hindu Pantheon. The worship of the divine mother in her terrible form might have been partly responsible for the predominance of the Tala Vadyas. Another factor is the Tantric nature of the worship in the temples as evidenced by the two slokas from Tantra Samuccaya of Chennas Nambudiri.

Sloka 230

शंखप्रेंखच्चटुलपटहोत्तालतालोरुभेरी-
रंगच्छृंगोड्डमरडमरूद्दीप्रवीणाप्रवीणाः ।
ढक्काढाक्कावरलमुरलीकर्मठाश्चाभियायुः
स्फायद्दीपास्तमिह महितोद्दामहेलामहेलाः ॥

Sloka 231

पञ्चवाद्यवरवादनाविधा-
चुञ्चवोऽग्र पुरतः प्रयान्त्विह ।
छत्रचामरविधारिणोऽभितः
पृष्ठतो जयजयादिवादिनः ॥

The following instruments are extant :

(a) The leather covered percussion instruments (Anaddha Vadyas). (1) Paani Maran (2) Chenda (3) Achen Chenda (4) Para (5) Edakka (6) Thimila (7) Thoppi Maddalam (8) Suddha Maddalam (normally referred to as Maddalam) (9) Kiti Piti (10) Damanan (11) Mizhavu.

(b) The solid metal instruments (Ghana Vadyas)

(12) Chengala (13) Elathalam (14) Kuzhithalam.

(c) The wind instruments (Sushira Vadyas)

(15) Sankhu (16) Kombu (17) Kuzhal (also referred to as Kurung-Kuzhal).

In addition, there are some instruments used in folk music, the important ones being

(1) Kokkara used by some hill tribes (2) Villu (3) Udukku (4) Pulluva Kutam (5) Nandrunni (6) Chetti Vadyam.

The Mridanga, the Thaval etc. are also used in Kerala but they are used in the same way as in Carnatic music and are therefore left out of consideration here. In contradistinction to the indigenous instruments these were considered "Paradesi" instruments by the older generation of Keralites. Technically, the Mani (Ghanta) is also a musical instrument used in worship but it is not considered a musical instrument normally.

A brief description of each instrument is given below :

(1) *Paani Maram* : This is a crude form of the Mrindanga. It is cylindrical in shape, a bit smaller than the Mridanga. It is covered on both sides with cow hide, with a black centre spot (choru) in its right end. It is played by the palms only, no fingering being done. It is considered a Daiva Vadyam.

(2) *Chenda*: This is one of the most important instruments in Kerala. It is a tall cylinder of hollow (usually jack) wood covered on both sides with the hide of a heifer. Its left end or tension end is covered with one whole piece of leather while on its right end six or seven additional circles of leather of diminishing diameters are pasted on to it in the inside. Though the instrument is considered an Asura Vadyam. the playing on its right side alone is allowed for some of the Tantric rituals. The right end is played on, whenever a 'God' is brought on the stage in Kathakali too. It is played either with one hand and one stick or with a stick in either hand.

(3) *Achan Chenda* is a bigger variety of Chenda which is found in Southern Kerala (Travancore area) and the volume of its sound is very much bigger than that produced by an ordinary Chenda.

(4) *Para* is a cylindrical drum bigger in diameter and shorter in length than a Chenda. Unlike the Chenda both sides have a single piece of leather-covering only. Both the sides are played with sticks. This is a speciality for the ritual known as "Paana" in Bhadrakali temples.

(5) *Eḍakka*: This is also a Daiva Vadyam supposed to be sent to earth by Lord Siva himself. It is an hour glass shaped instrument covered with a membrane from a cow's stomach on either side and the tension strings are manipulated with the left hand and it is played with a thin stick. It can be taken to be a bigger form of the Uḍukku of Mariamman temples. The manipulation of the strings can give so much tonal variations that one can produce swaras of more than one octave. So much so there are a few experts now who have converted this into an instrument for playing Kirtanas. This instrument deserves more popularity.

(6) *Thimala*: This is a tall hour glass shaped instrument. The leather used is that of a calf of a cow and the twisted cow hide straps are used as tension strings. This instrument is also played with the palms—one side alone is used—both the palms coming into play. Only two tones are produced. So all Jatis have to be produced by the quick beat of the palms.

(7) *Thoppi Maddalam*: This is very similar to a Mridangam but not so very refined. The Suddha Maddalam is used in its place increasingly.

(8) *Suddha Maddalam*: This is a Mridangam-like instrument very much bigger in size. The bulge in the middle is in the centre. It is usually made of jack wood. Its right end is covered with ox hide and its left end is covered with buffalo hide. On the right end there is the black centre spot added on as in the Mridanga. This instrument also is played with the palms on both sides. Unlike the Mridanga, little fingering is done on this instrument though the fingers are tape-capped. As a matter of fact on none of the tala instruments of Kerala is fingering done as is done on the Mridanga, probably because they are mostly out-door instruments and the sound of the fingering will not be audible enough.

In instruments like Chenda and Edakka the quick stick work sometimes surpasses the effect of fingering.

(9) *Kitipiti* is a two - piece instrument. If a Mridanga is cut in the middle and each piece kept up-right with the smaller face down it will more or less represent the shape, only it would be more tapered. It is used in a few temples as an Upavadyam for other instruments like Thaval etc. and played during the deeparadhana. It is also used as a sort of "pilot" in front of the elephant processions.

(10) *Damanam* or bigger Kitipiti is only a bigger sized instrument as mentioned above. It is found in a few temples.

(11) The *Mizhavu* is a pot usually of copper and the mouth is covered with wet leather. It attains good tension when it dries. This is played with both the palms only.

(12) *Chengala*: This is only a disc of cast bell-metal which is sounded with a stick. It can be taken as a solid metal gong. Two sizes are found used. No Jatis are played on it but it is sounded to keep time.

(13) *Elathalam*: This is only a big sized thick and heavy Jhalara. After striking the two pieces together the tip of one piece is slid over the other and this gives a prolonged

jingling sound. This is done especially when playing in slow tempo. This shuffling action is the peculiarity in its playing.

(14) *Kuzhithalam* is the ordinary Jhalara with a greater depression in the centre. This is used to keep time on certain occasions.

(15) *Sankhu*: This is only a conch with a hole. It is considered a divine instrument and all temple functions start only after it is blown. The sound coming out of it is Omkara and other instruments only take up this Omkara and play it further. While no Jatis are played on it normally, I have seen one person who can play Jatis of various Talas on it.

(16) *Kombu*: This is a bell-metal tube. Three pieces are joined together to form a semicircle. It is blown hard from one end. Jatis are played by controlled blowing. It is delightful to hear it especially from a distance.

(17) The *Kuzhal* or short pipe is almost identical with the Mukhaveena of the south or the Shahnai of the north.

(1) *Kokkara* is a piece of iron with a serrated edge on which another piece of iron is rubbed. This gives a grating noise. This is used by some hill tribes to keep time when they sing.

(2) The *Villu* is a bow of wood with a wooden rod fixed in place of the string. By beating on this rod with another piece of stick jatis are played. The tension on the rod is altered when holding it with the left arm with one end of the bow pressing against the chest. This alteration of the tension gives it a sort of twang. It is popular during the Onam festival. There are experts who play Thayambaka (Laya vinyasa) on it and it gets raised to the status of a classical instrument when such experts play on it.

(3) *Udukku* is the same as the Uḍukku used in Mariamman temples. In Kerala Mariamman temples are found wherever Tamilians are found. Uḍukku is used for Ayyappan Pattu.

(4) *Pulluva Kutam*: This is an earthen pot covered with leather from which a thong is taken and kept in tension by tying

it at the end of a stick. By plucking this thong a "Brum Brum" sound is made which is used to keep time for the songs on divine serpents sung by Pulluva women.

The male Pulluvan uses a fiddle-like instrument. At the end of the bow a couple of metal jingles are provided which he uses in place of a Jhalara.

Wooden rods (like kolattam rods) fitted with these metal jingles are used by village folk to keep time when they sing.

(5) *Nandunni* is an instrument in which a couple of strings are fixed on a rectangular piece box with a handle-like projection attached to it. The tension on the string is regulated by the "biradai" fixed on this projection. The strings are vibrated and it is used for sruti as well as for keeping time. This is used when singing songs in praise of the Devi (like Kalamezhuthu pattu by the community known as 'Kurup').

(6) *Chetti Vadyam* is a big Ganjira shaped instrument used by a community known as Kudumi Chettis. They are Konkani speaking "Sudras" who have settled in Kerala. This vadyam is popular with processions of "Kavadi" to Subrahmanya temples.

Talas: The following talas are generally used in Kerala:

(1) *Chempaṭa*: This is the Aadi Tala of 8 matras of Carnatic music. It is referred to as Jhompata in some old texts which has become Chempata in Malayalam.

(2) *Panchari*: Also mentioned as Panchakarika in some texts. This is equivalent to the Rupaka tala of 6 matras.

(3) *Aḍanta*—a tala of 14 matras equivalent to the Aṭa Tala.

(4) *Champa*—equivalent of Jhampa of 10 matras.

(5) *Dhruva Tala*—same as Dhruva tala of 14 matras of Carnatic music.

(6) *Tripuṭa* — same as Tisrajati tripuṭa of Carnatic music of 7 matras. This is sometimes called Muri Aḍanta (that is half of Aḍanta).

(7) Eka Tala is the same as Eka Tala of Carnatic music.

There are some other talas known as Lakshmi tala (equivalent to Lakshmisa tala), Kundanchi tala, Marma tala etc., which are found mentioned in some texts, like Oṭṭan tullal. But some have gone out of vogue and the details of some of them have become unknown. In folk music they use their own simple but sometimes delightful talas.

The use of the Tala vadyas in Kerala may be grouped as follows:—

(1) Those used in temple rituals, Tantric worship etc.

(2) Those used in Sopana singing.

(3) Chenda melam used in temple procession.

(4) Panchavadyam used in temple procession, Seva, Aradhana, Pradakshina etc.

(5) Laya vinyasa on various instruments during temple festivals, called Paṟṟu thayambaka etc.

(6) Instruments used in Kathakali.

(7) Ottam Tullal.

(8) Kooti Attam (staging of Sanskrit dramas).

(9) Folk music and some rituals of "Lower Caste" Hindus like snake worshipping Pulluvans and the Kali worshipping Kuruppu etc. Ayyappan Pattu, Vettakkaran (oru makan) Pattu, Antimahakalan Pattu etc.

Tantric worship and temple rituals

(1) Instruments used in Tantric worship in temples, or playing the Paani is done for certain Kalasas, Bali etc. The instruments used are Paani Maram, Chengala and Sankhu and right face of the Chenda.

Each beat on the instruments is supposed to coincide with a Tantric action of the priest. Its sound is supposed to represent the unuttered Mantra embodied in the Tantric sign. As such great importance is attached to have them played properly. Depending on the deity different modes of playing are there like Saiva Paani, Vaishnava Paani etc. Each stroke is made at definite time intervals and as the Tantric signs will be made at the same definite intervals the playing of the instrument and the ritual will go in unison. Many stories and legends are current which will go to show the divinity attached to this but it is a pity that both proper Tantric worship and proper playing have deteriorated. (The extent of deterioration can be imagined by the fact that even temple priests and assistants had struck work in South Kerala). However there is little music nowadays in their playing, though it follows a definite pattern of time measure. Similar daily temple rituals like Pradakshina, Sriveli, Sribhoota Bali etc. are there, when other instruments like Eḍakka, Thimila and Chenda are played.

Sopana Singing: During Poojas—Prasanna Pooja done under closed doors—both in the morning and night, music is sung at the steps leading to the sanctum sanctorum. Members of the Marar (drummer) community do it. Usually Ashtapadi is sung. The Chengala, Edakka and Kuzhithalam are used. The Eḍakka is the most important instrument and due to the large tonal variation possible it is a delighful accompaniment. Eḍakka has naturally attracted much attention and it deserves to be popularised.

Incidentally, Sopana singing is a speciality of Kerala and it is even claimed by many to be a system distinct from Carnatic music. However, many well-informed persons are of opinion that it is only a particular regional and functional style or *baani* of the present Carnatic style. Some rare ragas are found in Sopana singing—Ghantaram, Indalam, Kankunji, Paadi etc. It is unfortunate that this style has practically died out due to neglect and want of patronage.

(3) *Chenda Melam*: This is by far the most important and most common assemblage of Tala vadyas. It is used during elephant (or other) processions for temple festivals. The Chenda,

Kombu, Kuzhal and Elathalam alone are used. The number of each instrument can be any depending on availability of funds and space. The (Utsava Vigraha) deity is brought out and kept on the central one of the caparisoned elephants adorned with tall silk umbrellas, peacock feather fans and chamara. The drums start the Melam and the deity will be taken in procession round the temple in the prakaram. The drumming can be in various talas but will usually be in 4 or 5 kalams (tempos). Each kalam will be played according to the time allotted for completing the procession.

The following melas are played: (1) Panchari (2) Aṭanta (3) Champa (4) Chempaṭa (5) Dhruva (6) Anchatanta (7) Paandi.

Of these Panchari melam is used for processions inside the temple Prakaram and the Paandi melam is used for processions outside the temple. The other melams are all played inside the temple, but they are rarely met with and they are going out of vogue; Chempata however is played for a short duration before the start of any other melam.

There is no fixed duration for the melam. It depends on individual temples or circumstances. A few of the Chendas will be Uruttu chendas which will be played with both hands. They will play the Jatis or Vinyasas. The rest of the Chendas will only keep time.

Taking Panchari melam for example, they consider that each leading Chenda (Uruttu Chenda) should be supported by 4 time keeping ones, 3 Elathalam, 1 Kombu and 1 Kuzhal. The leader plays with both hands, the palm alone of the left hand and a stick in the right hand. The assisting Chendas use only one hand with a stick.

The Pañchari melam is started with the slow tempo of 96 matras per Tala vattam. There is particular Jati for the Talavattam. The same Jati is repeated in the same manner over and over again. After three or more Talavattams there will be a Kalasam (Muthayippu or Mohara). After that the same Jati is repeated. To many people this endless repetition may be a bit boring, but after one Tala vattam and a Kalasam the tempo is very slightly

increased. By slow degrees this tempo is increased—depending on the time. The first stage is played and then the next kalam of 48 matras is taken up. This is also played by repeating the same Jatis in the Talavattam and giving kalasam as in the previous kalams. After playing this for some time the next tempo of 24 matras and then that of 12 matras and again of 6 matras are taken up. When it reaches the 6 matras the tempo would be so quick that the connoisseur would find it difficult to keep time by merely nodding the head. His hands will be beating imaginary Chendas in the air. The flourish of the Chenda, the Kombu, Kuzhal and the Elathalam and the enthusiasm of the connoisseurs is a sight to see!

One of the top performances of this Melam can be heard at the Kootal Manickam temple at Irinjalakuda and at Perumanam temple, both in Trichur District.

Panchari melam is considered to be the most aristocratic of the melams. Its slow tempo consists of 96 matras per Tala vattam and the leader of the group has to be a really able man to keep track of the matras without mistake.

The Pandi Melam is played during procession outside the temples. It is in (Tisrajati) Triputa tala and is usually played in four stages of 56, 28, 14 and 7 matras. Here also a fixed jati is played for a number of times and after a certain number of Tala vattams–there does not seem to be a fixity about it, but is done according to the availability of time—a kalasam is given and again repeated over again. In Pandi melam however the Jatis played are different for the four kalas (tempos) unlike the other melam where the Jati is the same in the slower and faster tempos. One of the best performances of Pandi Melam can be heard at Trichur Pooram festival. There are mainly two competing parties for this festival and each party will have about 15 leading Chendas, some 60 time keeping Chendas, some 40 Elathaams, 24 Kuzhals and 24 Kombus. The volume of sound will be so big that it could be heard for miles around.

The melams are started when the deity is brought out from the temple and is kept on the central decorated elephant. Then the deity does pradakshina in the prakara of the temple, unless it is taken outside to a maidan or to visit another temple,

or for the Palli Vetta (divine hunting) or for Arattu (divine bath in the river or sea). It is the usual practice to play the Chempata melam first (that is the melam in Aadi Tala). This is done for 10 or 15 minutes and then other melams are played.

For most of the melams, the slow tempos will be in multiples of 8 of the basic matra of the tala. If it be Panchari (Rupaka Tala) it will be 6 × 16 = 96 matras for the first tempo. If it be Champa it will be 10 × 8 = 80 matras. For Chempata 8 × 8 = 64 matras and so on. The "Natai" will be usually Chaturasram and the Jatis will be in multiples of 8 matras. Therefore in the beginning one would feel that all these melas are being done in the Aadi Tala. Only when the tempo is increased and the Matras reduced to the basic tala will it be easily discernible which tala is being adapted.

Chempata melam 4 Kalams, first stage 64 matras eight Chempata vattams.

Anchatanta melam 4 Kalams, first stage 64 matras of eight Chempata vattams, but the jathi is different from the one used for Chempata mela.

Dhruva melam 3 Kalams, first stage 56 matras or 7 Chempata vattams.

Atantha melam 4 kalams, first stage 56 matras of 7 Chempata vattams but the jathis are different from dhruva melam.

Champa mela 5 Kalams, first stage 80 matras or 10 Chempata vattams; 2nd stage 40 matras, 3rd 20 matras, 4th 10 matras, 5th 5 matras.

Some of these melams are played for hours together, even upto six hours. During this period it would be found that the beats of all drums are heard simultaneously, without a false beat. This does credit to the sense of Laya of these Kerala drummers.

Pancha Vadyam: One of the most delightful combinations of Tala Vadyas is the Pancha Vadyam of Kerala. The following instruments are used :—

Sankhu, Thimala, Maddalam, Kombu, Edakka and Elathalam.

They say that Sankhu is only to give the Omkara nada and is not to be considered one of the Vadyams. There are others who consider Sankhu to be one of the instruments and that Elathalam is to be considered only as an aid to keep time. It is said that in olden days the Kuzhal also used to be included in the Pancha Vadyam ; anyway, now it is not. Suddha Maddalam is used now whereas formerly it used to be the more primitive Thoppi Maddalam. Formerly only one side of the Maddalam used to be played by keeping it in an angular position; now both sides of the Maddalam are played. It was during the time of Sri Venkichan Swami (Venkitachala Iyer) of Thiruvilvamala that some reforms were effected in the Panchavadyam playing and the present mode and order were brought about.

The playing starts after the conch is blown three times, the actual start taking place from the middle of the third blow. A full set consists of 7 Thimala, 4 Maddalam, 9 Elathalam, 7 Kombu 1 Edakka, 1 Sankhu. It is played during elephant processions inside the temple and outside, during Deeparadhana time etc.

The tala used is Triputa Tala of 7 matras. The first slow tempo is in 56 matras. Same Jatis are repeated for some time and then individual instruments Maddalam, Thimala or Edakka are played individually. This gives much scope for laya vinyasa and for the artists to show their merit.

The second tempo of 28 Matras is not elaborated but played for a short time using a special Jathi for the whole tala vattam and the next stage of 14 matras is taken up. From this stage the Triputa character of the tala will be noticeable. The next is 7 matras and even a faster tempo of 3½ matras. Finally they close it by playing in Ekatala. Thimila alone will be played towards the end. The hands of the Thimila artist would be playing in very quick tempo.

In Panchavadyam also according to the availability of time each stage of 56 Matras to 14 Matras etc. will be played in

increasing tempos, just as one increases the tempo while singing a Namavali in Bhajana.

Unlike Chenda melam where different talas are used Panchavadyam is at present played only in the Triputa Tala. There is much scope for research and experimentation in this and attempts should be made to introduce other melams also in Panchavadyam.

The prominence for these melams etc. is only in central Kerala. In south Kerala and north Kerala there is lesser prominence for elephant processions and these melas. In Taliparamba temple the deity is taken in procession on the head of the temple priests who dance to some of these melams.

Thayambaka, Pattu etc.

Laya vinyasa on the Chenda is known as Thayambaka and the Vinyasa on other instruments is known as Pattu (Maddala Pattu, Kuzhal Pattu and Kombu Pattu). There is however no Thimila Pattu.

During temple festivals Thayambaka is done at night. The deity is brought out and kept on a Mandapa and the drummer starts the vinyasa. The Chenda is accompanied by four time-keeping Chendas: two keep time on the left or tension end and two on the right end. Two or three Elathalams also accompany. Normally the Vinyasa is done in Chempata (Aadi Tala). After playing for some time in Chaturasra Nata he plays other Natas also. This is known as Kooru Vayikkal: Atantha Kooru, Panchari Kooru, Champa Kooru when he does Misra Tisra or Khanda Natas. A performance takes about 1 to $1\frac{1}{2}$ hours.

The Laya vinyasa done on the Maddalam is called Maddala Pattu. It is also known as Keli when it is done before the start of Kathakali. A Maddalam is usually accompanied by an Elathalam only. The Laya vinyasa is on the lines of the Thayambaka, but the difference due to the nature of the instrument will of course be there.

Kombu Pattu is delightful to hear. The Laya vinyasa brought out on a wind instrument is the special feature here.

Due to the strenuous nature of the blowing, two or three people take part in it by turns. This also follows the patterns of the other instruments but is of much lesser duration.

Kuzhal Pattu follows a different pattern. While in Chenda melam the primary function of the Kuzhal is that of a Tala vadya, in the pattu, the Kuzhal first plays the Nata raga. Then some major Raga is taken up. After Raga alapa a Kirtana or Pallavi is taken up and during the Svaram singing the Tala vinyasa is brought about. It is accompanied by a Chenda and Elathalam.

Kathakali is the dance drama of Kerala. It is only some 300 years since Kathakali came into being. The actors converse only by sign language with appropriate dancing. Musicians in the background will be singing the Padas. The Tala accompanists play a Chengala, Elathalam, a Maddalam and a Chenda if it be a male character who takes the floor. If a female character acts, the Chenda will either be absent or will be replaced by an Edakka. All the usual Talas are used. In addition to accompanying the singers for the Tala of the Padas the drummers have to play appropriately for the gestures or Mudras shown by the actors. This requires a good skill at adaptation and a thorough knowledge of the technique of Kathakali.

Before the actual beginning of the play there is sometimes a " Mela pada ".

The Ashtapadi " Manjutara kunjadala " is sung and the Bhagavatar does a sort of Neraval on the song which is appropriately taken up by the drummers. After that there is a " competitive " laya vinyasa by the Maddalam and the Chenda. This is a special piece for connoisseurs to appreciate and for the laymen to get thoroughtly bored with. The mela pada is done on the Jhampa tala.

During the acting Kalasam is done by the actors. This is a dance representation of the basic sentiment portrayed by the character. Such "bits" of dancing require special "support" from the drummers. In one Kalasa known as the Ashta kalasa there is a sort of "competition" between the drummer and the

actor. The actor has to dance an appropriate bit to represent the Jathi played by the drummer.

The Talas Chempata, Champa, Adantha, Muri Adantha or Triputa, Panchari and Ekatala are met with in Kathakali. Some of the "Sringara padas" for love scenes are rendered in very slow tempo. Adantha tala equivalent to Ada Tala of four Kala chowka will in effect be a tala of 56 matras. The ease with which the Kathakali artist handles such long-drawn-out talas in such a slow tempo would amaze even accomplished artists of Carnatic music.

In Ottam Thullal stories in verse form are recited showing gestures. Different Talas are used. The laya accompaniments are a Thoppi Maddalam and a Kuzhithalam. The Thoppi Maddalam is being replaced by the Mridanga now.

Kooti Attam is the staging of Sanskrit dramas where Rasa Abhinaya predominates. The characters recite Sanskrit slokas or prose passages from dramas, showing appropriate gestures or Mudras also. For detailing previous events "Nirvaham" is performed when only Mudras are shown. There is also a small amount of dancing involved in acting. This as well as the showing of Mudras follows a definite Tala pattern.

Various talas are used and the tala vadyas are the Mizhavu, the Edakka and the Kuzhithalam. There are conventions for using certain talas for certain situations, for certain characters and so on. The Mizhavu, a pot with its mouth covered with leather, though a primitive sort of instrument, is a good one in capable hands.

A Kuzhal accompaniment is also there for Kooti Attam. Originally this Kuzhal was to have been a tala vadya to play the Jathis like the other tala instruments but of late it is seen that the artist simply plays ragas or apologies for them according to his whim.

Incidentally there is an instrument in Tamilnad temples known as Kutamuzha which only goes to show the ties between amilnad and Kerala. Mizhavu is still in use in Kerala though

slowly dying out. An attempt to prevent its decay has already been started by the Kerala Kalamandalam.

Like other old art forms the art of drumming is slowly dying out in Kerala also. While formerly the head of the family used to take particular care to train up boys in the family, such care and the strenuous practice of olden days are absent now. As most boys learn by listening and by following practical demonstrations they know very little of the theory. Even some of the top artists I have approached were unable to explain many points. However those who have undergone some training in classical Carnatic music were able to explain the salient theoretical aspects of the art. Such people also show a greater tendency to adhere to the theory when they give performances.

There are no books to explain the theory. There are no courses for teaching Chenda melam in any of the institutions. Some classes are conducted by the Kerala Kalamandalam where the emphasis is of course on the Kathakali aspect of it. They have started a Thimila class for Panchavadyam. Their attempt to start a Mizhavu class has not succeeded for want of students.

It would be good to write down and publish the Vayattari (Sol-kattu) of the various melams and take recordings from the few elders who are still familiar with them. It is also necessary to bring out a proper text book on the subject. It is a pity that even the Sangeeta Nataka Academy of Kerala has not attempted anything on these lines yet. If the members of the Experts Committee of the Music Academy, Madras will take the initiative in the matter it would be a welcome move.

SAMARITAN CHANT

Dr. Spector, New York

About 14 years ago (1953) Dr. V. Raghavan expressed the opinion that Samaritan chant was remarkably like the South Indian Kauthuma style of Saman chant. He was particularly impressed by the occasional shouts for emphasis in the reading of the scripture, the interpolation of meaningless syllables and the *usage of udātta and anudātta* svaras. Since we do not know where Samaritans came from it is not impossible that there has been some connection between them and India in the past. It would be most remarkable if their music should shed light on their provenance, and I look to you, the experts of ancient and modern music of India, for suggestions and enlightenment.

My research into Samaritan music proceeded in several stages. Interested in ancient traditions I was first struck by the archaic way of their Biblical cantillation which seemed so much more basic and primeval than anything in Hebrew I had heard before. I found that the Samaritans had only ten neumes instead of 27 of the Jews, indicating an early stage of development. But when I tried to correlate the written symbols with the melodicles actually performed I could not find any connection. After years of study I had to abandon the project finding that the interpretation of the neumes had been forgotten and substituted by *three* basic ekphonetic signs. The reversal from more sophisticated to simpler music notation may have been due to the decimation and general cultural decline of the Samaritans throughout the ages. In order to substantiate this startling deduction I did a complete ethnological and historical study of the Samaritans which I hope to publish in the near future. Further investigation showed that while the Samaritans do not have ten individual *neumes* they possess ten individual *melody-types*. That means that the same text can be chanted differently on ten different occasions as New Moon, festivals, weddings and the like. These ten melody-types differ in tempo, range, rhythm, melodic pattern and could be fore-runners of the *maqam* or *raga concept*. They would certainly have preceded individual neumes in time.

But before listening to the examples permit me to give you a historical and anthropological background of the Samaritans.

As is well known there is no agreement as to the origin of Samaritans. There is the Samaritan view and that of the Jews.[1]

The Samaritans, *Shomronim* or *Shomrim* in Hebrew, hold themselves to be the "true Hebrews", the "guardians of the law", and claim that their history is the history of the Jews until the tenth century B. C., when they separated from the main body of the Jews in a dispute over the location of the Temple site and other matters. It is their belief that the Jews transgressed in building the Temple in Jerusalem and not on Mount Gerizim. Also they claim that the Jews altered the Ten Commandments by omitting the last commandment and thus justifying the building of the Temple in Jerusalem. (The Samaritan Tenth Commandment decrees the Temple site on Mount Gerizim.)

The Jews, on the other hand, regard the Tenth Commandment of the Samaritan Decalogue as a late addition and falsification of the original for the purpose of justifying the worship on Mount Gerizim. The name *Shomronim*, they say, derives from Shomron, Samaria, where the Samaritans were settled. Furthermore, the Jews claim that according to Biblical sources the Samaritans are descendants of settlers transplanted to Palestine in the eighth century B.C. by the Assyrian King Sargon and later colonizers and are therefore not descendants of Abraham at all. Based on *Kings* II, 17 : 5, 6 and 24 and *Ezra* 4 : 10, the Jews insist that the population of Samaria was carried away in 722 B.C. into Assyria and placed in Halah, Habor, by the river Gozan and the cities of the Medes, and replaced by foreign peoples from Cuthah (the Talmud[2] calls the Samaritans " Cuthim ", that is people from Cuthah) Ava, Hamath and from Sepharvaim ; that later in 715 B.C. Sargon had brought the Arab tribes Tamud, Abdani, Marsmani, Hipa ('Ipa) and in 650 B.C. Dinaites, Tarpelites, Babylonians and others.

Between these two extreme views Ishaq Ben Zwi (1935, p.15), the greatest authority on Samaritan culture, takes an intermediary

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1 Christianity and Islam adhere to the Jewish point of view.

2 Rabbinical commentary on the Bible (3rd cent. B.C. to 3rd cent. A.D.).

position. He observed that only 27,290 people were taken out of Samaria into captivity, while there were at least 60,000 registered landowners in Samaria not counting the poor folk. Therefore only part of the original population was taken into captivity while the majority of the population remained *in situ*, and exercised its influence on the newcomers, both racially and culturally.

Whatever the historical truth, it remains an undisputed fact that the Samaritans are an ancient people, at least 2,700 years old. And what is more, they have remained all this time in the same geographical area.

The history of the Samaritans since 200 B.C. was a series of misfortunes, persecutions and murders. From a nation of at least 60,000 about 722 B.C. (Ben Zwi) they shrank to a few thousands in the seventh century A. D. (Vilmar, 1825) and dwindled in 1875 to 135 souls (Conder and Kitchener, 1882). Since 1900 the almost extinct community started to revive again and has been increasing steadily until in the present year it numbers over four hundred.

These 402 individuals, men, women and children, live today both in Israel and in Jordan, and have never in their long history lived anywhere else but the Near East. There were at some time or other small settlements in Syria, Lebanon and Egypt but they do not exist any more.

There are today 162 Samaritans in Israel, with few exceptions living in the Samaritan Housing Development of Holon, called *Shikun Hashomronim*, and 240 Samaritans in Jordan, all living in Nablus, the ancient Shkhem or Sicem. Once a year at Passover, all the members of the two communities join for a pilgrimage to Mt. Gerizim, their holy mountain near the city of Nablus. There they remain for eight days and during that time they are united in ritual and prayer. The first day is the "Feast of Passover", *Hag Hapessah* or the "Passover Sacrifice", *Zevah Pessah*. The following seven days are the "Feast of Unleavened Bread", *Hag Hamatsoth*. The observances of the Passover Sacrifice exactly as prescribed by the Bible are only kept by Samaritans, while all Jewish sects have abandoned animal sacri-

fices since the destruction of the Second Temple (about 70 A.D.). *Hag Hamatsoth* however is kept by all Jews.

The Samaritans are not only strictly endogamous within their own community, but often within a single lineage. The Samaritans claim descent from four Hebrew tribes: Levi, Ephraim, Menashe and Benjamin. The High Priest and the priestly class, the Cohanim, belong to the tribe of Levi, and with the exception of four women live all in Jordan. Three lineages the Denfi, the Serawi and the Marhiv derive from the tribe of Ephraim. One large lineage, the most numerous in Israel, namely the Sedaqa-Sappari trace their ancestry to the tribe of Menashe. The tribe of Benjamin claims only one surviving member, whose lineage is in doubt, because of insufficient data. Marriages are contracted regardless of political boundaries, and the new spouses are permitted by both Israel and Jordan to cross into the country of their choice. By this both governments admit that the Samaritans are a separate religio-ethnic group and should be treated as such.

The settlement in Israel is relatively young. It started about 1900 when Avraham Sedaqa came to work in Jaffo and settled there with his family. Many other Samaritans worked during the day in the same area, but after work went home to Nablus. After the establishment of the State of Israel in 1948 these migrant workers had to decide whether to live permanently in Israel or to rejoin their families in Jordan. Many of the Samaritans decided to stay in Israel, although they knew that they would not be able to see their kinsfolk frequently. In 1955 the *Shikun Hashomronim* was established in Holon and, in February 1963, the synagogue was dedicated by President Ishaq Ben Zwi, a long-time friend and patron of the Samaritans. The Samaritans came to him with their problems, looked upon him as their spiritual father and were inconsolable at his death. Ben Zwi had worked with the Samaritans for over forty years, published some of their manuscripts and written a history of the Samaritans.

Today there are fifteen neat, white houses in the *Shikun Hashomronim* with their centre, the synagogue, facing Mt. Gerizim (North-East). A deeply religious community inhabits

them. Every night after work, but especially on Friday nights and holidays the community changes into traditional garb. The little boys from the age of three on are dressed exactly like their fathers and go with them to the synagogue to pray. The traditional garb consists of longflowing white garments, often with a fine blue or gray stripe, topped by a white long coat, and red fezzes, black tassels or simple white caps. The red fez or the white cap is sometimes adorned with a golden brocade band, which shows rank or scholarship. The Samaritans are a tall, strong and handsome people with a marked strain of blondism. They are remarkably healthy and do not show ill effects of close inbreeding. First-cousin marriages are preferred.

Women rarely go to synagogue and know neither prayers nor traditional chants. Women therefore do not know the music of the Samaritans, but only the secular folksong of the surrounding population (Arab). I hasten to add that the situation as regards women is changing, at least in Israel, and some women do know the prayer-chants.

Samaritans possess only religious music performed by its male members since time immemorial. There are no musical instruments, and only handclapping is used on joyous occasions such as weddings and circumcisions. It is only recently, as a result of acculturation, that Arab *al'Ud* players (lutists) or flutists entertain at a wedding after the ritual ceremony. At the same time radios are also used, and the blaring loudspeakers drown all ordinary conversation.

The strongest link between Jews and Samaritans is the reading and the chanting of the Pentateuch, the Five Books of Moses, which constitutes the basis of both religions. The specific chanting of the Hebrew Bible is called *cantillation*, which proceeds according to special graphic signs attached to every word of the text as practised by Jews. These cantillation motifs are called *accents* by European and *ta'ame hammiqra* by Hebrew grammarians. The Hebrew *ta'ame hammiqra* have three purposes: 1) accentuation of the syllable, 2) a hermeneutical or syntactical objective, and 3) a purely musical function providing every word with a musical motif. The chanting of

the Samaritan Pentateuch is supposed to proceed according to similar graphic signs called *sidre miqrata*. The terminology of both systems suggests a common origin: *sidre miqrata* is the Aramaic form of the Hebrew *seder hammiqra* or *ta'ame hammiqra*, *afsaq* is the Hebrew *psiq*, *pasuq* or *sof pasuq*, *ana(h)u* the Habrew *munah* etc. etc. The oral tradition of both the *sidre miqrata* and *ta'ame hammiqra* goes back to the first millennium B.C., and is probably as old as the recitation of the Bible in public gatherings instituted by Ezra in the fifth century B.C. The written tradition started in all probability roughly a thousand years later, around the 6th century A.D. and was developed by the Massorites.

Both the *sidre miqrata* and the *ta'ame hammiqra* are according to definition non-diastematic neumes. (Each neume consists of two or more notes, but does not indicate specific interval value.) But while the *ta'ame hemmiqra* of the Jews have reached a high degree of sophistication and refinement, especially in Europe, where each neume is not only defined as to melodic interval but also as to rhythm, the Samaritan neumes have retained a very early form using several neumes to a verse or an entire sentence. The number of Samaritan neumes is also smaller, only ten instead of the Jewish twenty seven. It is clearly an earlier form of development of cantillation, which shows for instance marked similarity with the early Palestinian and Babylonian system of *ta'ame hammiqra*, at least in number and function of the symbols. As to dynamic indications as forte, piano, diminuendo and crescendo, it is only the Samaritan neumes that imply these changes. According to some early grammarians Hebrew *ta'ame hammiqra* also indicated dynamic changes, but the practice has been lost. Contemporary usage of Jewish *ta'ame hammiqra* does not recognize this function and no Jewish group practises it today.

(*Example* of dynamic change in the chanting of the Samaritans.) Both functions namely the grammatical (accents) and the musical (neumes) are closely related, but while the grammatical function has been thoroughly investigated by Samaritan and European scholars the musical function has remained obscure in spite of efforts of several musicologists.

Following the idea that every one of the ten symbols of the *sidre miqrata* must have its musical counterpart, countless Biblical portions *(parashoth)* were examined. So far however all investigations led to the disappointing conclusion that the musical interpretation of the *sidre miqrata* must have been lost perhaps a few hundred years ago, when a dying Highpriest refused to divulge its secrets. (There is a parallel for such refusal to hand down musical traditions during Temple times.)

The present Highpriest recites *parasha* in no known system, apparently not according to the ten *sidre miqrata*, and Israeli Samaritans use only three principal melodicles which they call by various terms, e.g. "Kaved" (heavy), "hatsi kaved" (medium heavy) and "qal" (light). These three melodicles correspond roughly to *afsaq*, *ana(h)u* and *enged arkenu*, which in turn relate to the Hebrew *sof pasuq*, *atnah* and *gadma-pashta*. As is well known these three derive as all first musical symbols of antiquity from *cheironomy* (head and hand-movements of the conductor) and are called ekphonetic signs. There are parallels in India, Greece, Rome and Armenia, to which we can now add the Samaritan cantillation motifs of *afsaq*, *ana(h)u* and *enged-arkenu*. In function and design all ekphonetic signs show a marked resemblance.

The earliest ekphonetic signs derived from *cheironomy*:

India	Greece	Rome	Israel	Armenia	Samaritan
udatta /	oxeia /	acuta /	qadma /	sour /	arqenu-enged /
anudatta . _._ . .	bareia _	gravis /	{ silluq sol pasuq \	pouth /	afsaq ⁖
svarita . . . . ◡)	peripo-mene ⌒ ∧	circum-flex ⌒ ∧	atnah ⊥ ∧	barouk (	ana'u ·○<

But how can it be explained that the Samaritans use only three out of the prescribed ten symbols? Does it mean that a

people after reaching a remarkable degree of sophistication, had reverted to an earlier stage of musical development, forsaking neumes for basic ekphonetic signs ?

While the investigation of the ten individual *sidre miqrata* had to be abandoned, another aspect of Samaritan cantillation was taken up, namely the different styles of chanting Biblical passages on different occasions as *parashat shabbat* (portion on the Sabbath at home); *midday Sabbath in the synagogue; public reading on Shvuoth new moon; for the Dead; wedding, circumcisions confirmations*; *special holidays; studying scripture;* and *reciting the eleven plagues.* (The Jews have only ten plagues !) The change from one style to the other is considerable and seems unique to Samaritans. The different occasions seem to demand a definite, prescribed style which expresses itself in tempo, range, recurrent note, finalis, cadences, musical accents and melodicles as well as in performance practices, voice production and dynamics. The Samaritans have a special expression for some of their elaborate and ornamented types of cantillation, namely *kaved-kashe* (heavy-difficult) as for *mofatim* and *pessah.* These two types of chanting are very slow and microtonally embellished and may take as long as sixty seconds for a verse, while the identical verse chanted on another occasion, e.g. for the Dead, takes only nine seconds to perform. To be able to sing such a heavy, difficult chant is not only a source of pride to the performer but also a mark of distinction and a status symbl in the community.

The most vividly contrasting melody-types are the slow chants just mentioned (*mofatim* and *shvuvoth*) namely Nrs. 6 (slow) and 9, (slow) and the reading *for the Dead* or studying the Biblical portion *(parasha)* Nrs. 1 and 10 (fast). The slow chants, Nrs. 6, 7, 8, 9, are usually highly ornamented and drawn out, while the fast chants, Nrs. 3, 4 and 10 have hardly any ornamentation and are simpler in melodic structure, almost entirely resting on one or two notes. The two melody-types containing short but complete melodicles like the *plagues*, Nr. 7, and *rosh-hodesh* (New Moon), Nr. 8, are reminiscent of joyous folk-motifs, and have perhaps their source in secular folk-song. It is curious that some of the motifs show similarity with Yemenite Jewish

cantillation motifs, so far an unexplained phenomenon. One could of course speculate that both derive from the same ancient source, but such speculation seems premature.

All ten melody-types can be grouped as follows:

1) slow, highly ornamented, heavy with grace notes and vibrato Nrs. 5, 6, 9.

2) fast, on one or two notes, Nrs. 2, 3, 4.

3) rhythmical, complete and repeated melodicles reminiscent of fragments of folksong, Nrs. 7 and 8.

4) medium fast, closest to the practice of the Jews, Nrs. 10 and 1.

The number "ten" both for *sidre miqrata* and melody-types is intriguing but also misleading. So far there seems no connection between the two. If contemporary practice of the Samaritans can be taken as evidence, no connection exists between the two: not under any circumstances would my Samaritan informants call the melody-types by *sidre miqrata* terminology.

Summary

Researches have so far shown that the ten original *sidre miqrata* fell into disuse some time ago and were substituted by the three ekphonetic signs, in musical terms a regression; that ten distinct melody-types exist unrelated to the original ten *sidre miqrata* in spite of the number "ten" which seems accidental; and that these melody-types are of the greatest importance for the performance of Samaritan cantillation on specified occasions. The usage of different melody-types for identical texts is unique in Pentateuch-cantillation and quite unlike Jewish Biblical cantillation of today.*

And now to the recordings:

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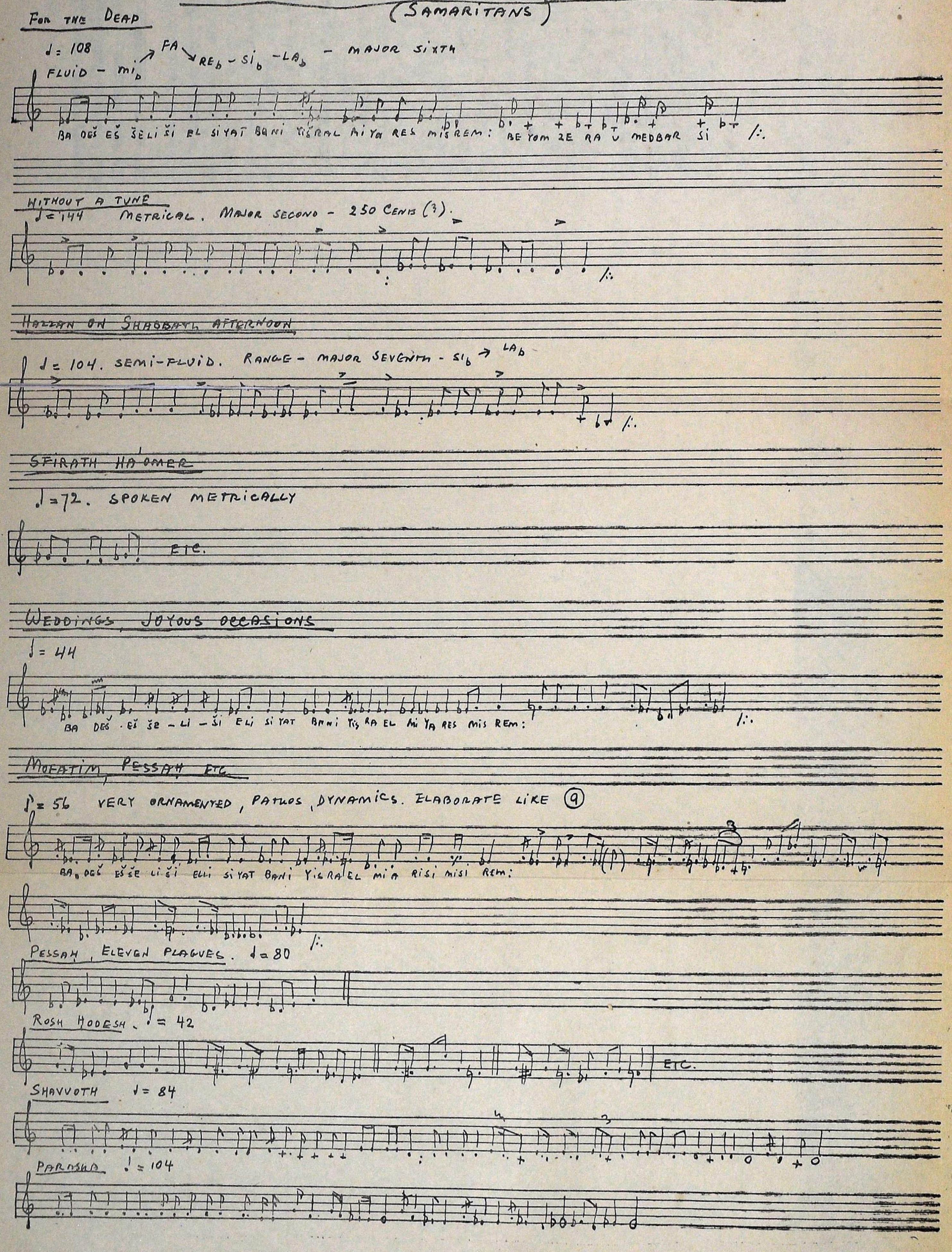
*The possible exceptions: Bibilical Songs, where cantillation may be substituted by set tunes (e.g. Kurdistan) or the Sabbath and Holiday versions (2) of Pentateuch cantillation (Ashkenazic Jews).

1st example–	the Highpriest Amran ben Ishaq reads the Bible (Exodus IXX) with dynamics.
2nd example–	The Highpriest Amran ben Ishaq reads the Bible among the other priests at home. Very much like Jewish reading.
3rd example–	with insertion of syllables, on public occasions. Very unlike Jewish reading. (awa, aw)
4th example–	reading by a Samaritan boy, born and bred in Israel.
5th example–	congregational singing in the synagogue on the New Moon. Polyphonic, unlike any other Middle Eastern group except the Yemenites.
6th example–	music from outside. At wedding and other festivities Arab musicians are invited to entertain the guests. Here it is an 'Ud-player and drummer. The 'Ud is the Middle Eastern lute, shortnecked with a pearshaped body, five to eight strings, played with a plectrum.

I may say again that Samaritans do not use any musical instruments, and do not have folksong of their own, only religious music.

My thanks go to the President of the Music Academy, the President of the Conference and Dr. Raghavan for inviting me to speak and to you, the audience, for listening patiently.

THE 10 MELODYTYPES IN THE CANTILLATION OF THE BIBLE. Ex. 19.
(SAMARITANS)



COMPARATIVE STUDY OF TALA SYSTEMS OF HINDUSTANI AND KARNATAK MUSIC

By

Dr. S. N. Ratanjankar.

Tala is a class of Matra Vrittas in which musical compositions, Geya-Padas as distinguished from mere verses, are sung. Verses can be sung as just recitals without any musical setting. But musical compositions have to be sung or reproduced on musical instruments. Classical Geya Padas (compositions of classical music) have to be developed and improvised with Raga, Tana (Alapas and Tanas) besides their texts which have to be presented according to the original version as set by the composer concerned. The refrain of the composition has to be repeated every time after completing an extempore improvisation on the Sama (सम) of the composition, (the syllables of the song on which the Sama (सम) of the Tala is placed in the original text). So far as I know, unlike the classical compositions of Hindustani Sangeet, those of Karnatak Sangeet always open on the Sama of the Tala. At least I have not come across any classical composition of Karnatak Sangeet opening on any Matra other than of the Sama (the first Matra) of the Tala. The refrain, therefore, of a classical composition of the Karnataka Sangeet would be the first round of the composition in the first round of the Tala.

Not so in the case of the classical compositions of Hindustani Sangeet. A classical composition of Hindustani Sangeet may open on any Matra other than the Sama. It may open on the 5th, 6th, 8th, any Matra before the Sama, so that the refrain in the case of classical compositions of Hindustani Sangeet is the first cadence of the composition from the Matra on which it opens, up to the Sama.

Let me illustrate the refrains of compositions of both the systems. I shall first take up the composition in Athana of the Karnatak Sangeet namely "Anupama gunambudhi" as it was taught to me; it is in Khanda Chapu, 2+1+2.

Text

PS	SN	PDH	DHN	P	P	MRMR	M	P		—
A -	NU-	PA-	MA-	GU	ṆĀ	- - - M	BU	DHI		—
x		2	3		x		2	3		4

Extempore Improvisation

NS	RN	SD H	Np	MP |
x		2	3	

MM RR	MP	SN	DH N	PS |
x		2	3	

Refrain

S	SN	P DH	DH N	P	P	MRMR
A	NU -	PA -	MA -	GU	ṆA	- - - M
x		2	3		x	

M BU	P DHEE	— |
2	3	

Note: (1) Dotted notes are top notes.

(2) Underlined N is Kaishik NI

(3) Sign of multiplication stands for the Sama.

(4) Small Svara on top left of a main Svara is a grace note.

(5) The tie below two or more notes like ‿ stands for one Matra so that all notes within that tie are to be sung within one Matra.

The refrain of classical composition of Hindustani Sangeet on the other hand, which opens on a Matra other than the Sama will be like this. I shall take a Druta Khayal in the Hindustani Raga Adana:

Adana—Trital

```
                 S     .   P
Text   M -   P  NP   N  S  -  N  PP  PN
       A - | YU --  RE - | - KA -R  KA-|
             o                3

       m
        P   -MG   M -
       RA   ---/  --
        x
```

This composition opens on the 7th Matra, i.e. 10th Matra before the Sama. The refrain of the song after extempore improvisation will be the opening cadence from the 9th Matra upto the Sama. To illustrate :

```
Improvisation   NS  RR  DHN  MP / NDH  NS
                x                   2

                      S       P
Refrain    M -   P  NP N  S - N PP  PN
           A - / YEE -- RE - / - KA - R  KA - |
           m
            P
            RA
```

Whatever might have been the Tala system in Karnatak Sangeet in the remote past, the modern system of that music has seven principal Talas with their five varieties each according to what is known as jatis, thirty-five Talas in all, in which the classical compositions of Karnatak music are sung and played on instruments. These seven Talas are :

(i) Dhruva, (ii) Mathya, (iii) Rupaka (iv) Jhampa, (v) Triputa, (vi) Ata and (vii) Eka.

These seven Talas have each, as pointed out just now, five varieties known as Jatis. These Jatis are determined by the time length of the Laghu which is marked by a vertical straight stroke. This Laghu holds different time lengths and according to that time length the Jati is determined.

The five Jatis are :—

1. Chaturasra :—when the Laghu covers				4	Matras.
2. Tryasra :	do	do	do	3	do
3. Khanda :	do	do	do	5	do
4. Misra :	do	do	do	7	do
5. Sankeerna :	do	do	do	9	do

There are, thus, 35 Talas in which the musical compositions of Karnatak Sangeet are sung and played on instruments nowadays.

I do not know if every one of these Talas is in common vogue. The most common in vogue appear to be:

Rupaka of Chaturasra Jati

Triputa of Chaturasra Jati known as Aditala.

Dhruva of Chaturasra and perhaps Khanda Jati

Atatala of Chaturasra Jati and

Mathya Tala of Chaturasra Jati.

There are musical compositions composed by great Masters of the past ages in every one of the 35 Talas which are sung and played on instruments by expert specialists. But I wonder if an average Karnatak musician sings or plays on an instrument compositions in every one of these Talas well enough. Most of the Talas occur, I am told, in the South Indian dances.

Let me now illustrate the seven principal Talas known in Karnatak system as "Sooladi Sapta Talas" with their varieties.

I. Dhruva Tala		Laghu		Druta		Laghu		Laghu
(a) Chaturasra Jati		1		0		1		1
	14 Matras.	4	+	2	+	4	+	4
(b) Tryasra Jati	11 Matras.	3	+	2	+	3	+	3
(c) Khanda ,,	17 ,,	5	+	2	+	3	+	3
(d) Misra ,,	23 ,,	7	+	2	+	7	+	7
(e) Sankeerna	29 ,,	9	+	2	+	9	+	9

			Laghu		Druta		Laghu
II.	Mathya Tala		1		0		1
(a)	Chaturasra Jati	10 Matras.	4	+	2	+	4
(b)	Tryasra ,,	8 ,,	3	+	2	+	3
(c)	Khanda ,,	12 ,,	5	+	2	+	5
(d)	Misra ,,	16 ,,	7	+	2	+	7
(e)	Sankeerna	20 ,,	9	+	2	+	9

			Laghu		Druta
III.	Rupaka		1		0
(a)	Chaturasra Jati	6 Matras	4	+	2
(b)	Tryasra Jati	5 Matras	3	+	2
(c)	Khanda	7 Matras	5	+	2
(d)	Misra	9 Matras	7	+	2
(e)	Sankeerna	11 Matras	9	+	2

			Laghu		Virama		Druta
IV.	Jhampa Tala						
(a)	Chaturasra Jati		1		◡		0
		7 Matras	4	+	1	+	2
(b)	Tryasra Jati	6 Matras	3	+	1	+	2
(c)	Khanda Jati	8 Matras	5	+	1	+	2
(d)	Misra Jati	10 Matras	7	+	1		2
(e)	Sankeerna Jati						
		12 Matras	9	+	1	+	2

			Laghu		Druta		Druta
V. (a)	Triputa Tala		1		0		0
(a)	Chaturasra Jati	8 Matras	4	+	2	+	2

(This Chaturasra Jati Triputa Tala is also known as Adi Tala.)

(b)	Tryasra Jati	7 Matras	3	+	2	+	2

(This Trysra Jati Triputa Tala is an equivalent of the Hindustani Teevra Tala.)

(c)	Khanda Jati	9 Matra	5	+	2	+	2
(d)	Misra ,,	11 ,,	7	+	2	+	2
(e)	Sankeerna	13 ,,	9	+	2	+	2

		Laghu		Laghu		Druta		Druta
VI.	Ata Tala	1	+	1	+	0	+	0

(a)	Chaturasra Jati 12 Matras		4 + 4 + 2 + 2

(This Chaturasra Ata Tala is the equivalent of Hindustani Choutala as well as Ektala.)

(b)	Tryasra Jati	10 Matras	3 + 3 + 2 + 2
(c)	Khanda ,,	14 ,,	5 + 5 + 2 + 2
(d)	Misra ,,	18 ,,	7 + 7 + 2 + 2
(e)	Sankeerna Jati	22 ,,	9 + 9 + 2 + 2

VII. Ekatala

			Laghu
			1
(a)	Chaturasra Jati	4 Matras	4
(b)	Tryasra ,,	3 ,,	3
(c)	Khanda ,,	5 ,,	5
(d)	Misra ,,	7 ,,	7
(e)	Sankeerna ,,	9 ,,	9

This information I have quoted from the late Pandit Bhatkhandeji's text book, the 4th part of the Kramik Pustak Malika. He has given these details as he got them from the Tala experts of Karnatak system such as Panchapakesh when he made his Southern tour in 1904.

Let me now turn to the system of Tala of Hindustani Sangeet. The Hindustani system has about 30 Talas, fifteen or so of which are in common vogue and the rest are practised and demonstrated by specialists. There are no Jatis as such of Talas in the sense of the five different durations of the Laghu as recognised in the Karnatak system.

Every Tala of Hindustani music has its definite number of Matras and divisions. There are some pairs of Talas which have identical number of Matras and identical divisions such as Ektala and Choutala, Hindustani Rupak and Teevra. But they are distinguished from one another by (1) the Thekas (the mnemonic compositions for marking the Tala on Mridanga or Tabla) (2) their tempo and (3) their application.

The Jatis in the Hindustani Tala system are considered as varieties, not of the talas themselves but as variations of the tempo in relation to the original basic tempo in which the Tala is taken up. Tempo is known as "Laya" in Hindustani music: 'Laya' is the same as "Kala" in the Karnatak system. For instance Vilamba Kala is "Vilambit Laya" in Hindustani music. One Matra is the unit of time. This Matra may be one second, 1½ seconds, 2 seconds, 3 seconds etc. as desired. Once the Matra is fixed at any one of these lengths it is a constant quantity. It is by parts of this one Matra half, one third, one 4th, one 5th, one 7th and one 9th of a Matra that the tempo of the music varies in the course of a performance. Of course the last two namely 1/7th and 1/9th of a Matra are very rarely demonstrated, complicated and difficult as they are. These varieties of tempo are considered to be Jatis. It is Tryasra Jati Laya when 1, 3 or 6 syllables occur in one Matra and each syllable is equal to 2/3, 1/3 or 1/6 of the Matra. It is Chatu-rasra Jati Laya when 4 syllables occur in one Matra, each syllable being equal to 1/4th of the Matra, Khandajati when 5 syllables occur in one Matra; each syllable is 1/5th of the Matra and so forth. The Jati is indicated by the word Guni. Thus Trisrajati is called Triguni or Tiguni, Chaturasrajati is called Chouguni, Khandajati is called Panchguni or Sawai of the Chaturasrajati. When 3 syllables occur in two Matras the tempo is known as Adee or Dedh-guni. When two letters cover one Matra it is Dwiguni or Duguni and when six letters occur in one Matra the tempo is Chheh-guni. Adee and Chhehguni come under Tryasra Jati. When there is just one syllable for one Matra it is known as Thah Laya. This word Thah appears to be a currupt form of "Sthayi". Thus

1. 1 syllable per one Matra is called "Thah" Laya
2. 3 syllables in two Matras is called Adee or Dedhguni
3. Two syllables per one Matra is Dviguni or Duguni
4. Three syllables do do Triguni or Tiguni
5. Four do do do Chouguni
6. Five do do do Panchguni or Sawai of the Chouguni

and so forth.

Let me now try to demonstrate the different tempos successively. We shall take the Theka, the mnemonic composition of the Choutala, the Tala used in the Dhrupad and played on Mridanga of the Hindustani system of music. It is 4+4+2+2 and runs in its Thah Laya normal tempo as

1	2	3	4	5	6	7	8 /
x				2			
Nā	Dhin	Dhin	Nā	Nā	Dhin	Dhin	Nā /
Nā	Dhin	Dhin	Nā	Nā	Dhin	Dhin	Nā /

9	10	11	12	13	14	15	16 /
Nā	Tin	Tin	Nā	Nā	Dhin	Dhin	Nā /
o				3			
Nā	Tin	Tin	Nā	Nā	Dhin	Dhin	Nā /

In its Adee or Dedh Guni Laya, i.e. with these syllables per two Matras it will be like this :

1 2 3 4 5 6 7

x Nā-Dhin -Dhin- Nā-Na Dhin / 2 Dhin-Nā -Nā- Tin-Tin

-Nā- / o Nā-Dhin -Dhin- Nā-Nā -Dhin- / 3 Dhin-Nā -Nā -

Dhin-Dhin -Nā- / x Nā-Tin -Tin- Nā-Nā -Dhin- /

Dhin-Nā -Nā- Dhin-Dhin -Nā- / Nā-Dhin -Dhin- Nā-Nā
2 o

-Tin- / 3 Tin-Nā -Nā- Dhin-Dhin -Nā- / Nā
x

Thus three rounds of Theka in two rounds of the Tala.

In its Dviguni i.e. with two syllables per one Matra it will be

Nā Dhin Dina Nā Nā Dhin Dhina /
x

Nātin Tinna Nā Dhin Dhinnā
. 2

Nā Dhin	Dhinna Nādhin	Dhin Nā	
o			
Nātin Tinnā	Nādhin		Dhin Nā
3			

Two rounds of Theka in one round of Tala.

In its Tiguni, with 3 syllables per one Matra it will be

Nā Dhin Dhin	Nā Nā Dhin	Dhinnā Nā	Tin Tinnā
x			
Nādhindhin	Nā, Nādhin	Dhin Nāna	Dhin Dhin Nā
2			
Nātin Tin	Nānadhin	Dhin Nāna	Dhin Dhinna
o			
Nādhindhin	Nā Nā Tin	Tinnānā	Dhin Dhinnā

Three rounds of the Theka in one round of Tala.

In its Chouguni with 4 syllables in one Matra it will be

Nā Dhin Dhinnā	Nādhindhinnā	Nātin Tinnā	Nadhin Dhinna
x			
do	do	do	do
2			
do	do	do	do
o			
do	do	do	do
3			

I shall now quote the forms of the Talas of Hindustani music and their Thekas.

I. Kaharwā 4 Matras

Played on Tabla and used in devotional Bhajans and other light songs.

Matras	1	2	3	4
Theka	Dhage	Nati	Naka	Dhin Dhin /
Tala Marks	X			

II. Dādrā 6 Matras

Played on Tabla and used in Thumris, Bhajans and other light songs.

Matras	1	2	3	4	5	6
Theka	Dha	Dhee	Nā	Dhā	Too	Nā
Tala Marks	X			O		

III. Teevra or Teora 7 Matras

Played on Mridanga and used in Dhrupad styles of songs.

Matras	1	2	3	4	5	6	7
Theka	Dhā	Din	Tā	Tita	Kata	Gadi	Gina

IV. *Rupak* of the Hindustani system 7 matras used in Vilambit Khayals and played on Tabla :

Matras	1	2	3	4	5	6	7
Thekā	Tee	Tee	Nā	Dhee	Nā	Dhee	Nā
or	Tin -	Tā	Traika	Dhin	Traka	Dhee	Nā
Tala Marks	X			2		3	

The Sama of the Tala is an off Nishada Kriya, shown by waving the hands aside.

V. Dhumali, 8 Matras played on Tabla and used in Bhajans, Keertans and light songs :—

Matra	1	2	3	4	5	6	7	8
Theka	Dhā	Dhin	Nā	Tin	Nāka	Dhin	Dhāge	Tita
Tala Marks	X		2		0		3	

VI. Jhaptala, 10 Matras played on Mridanga as well as Tabla. Used in compositions of Khayal style when it is played on Tabla and when it is used in Dhrupad style of compositions it is played on the Mridanga.

(A) As played on Mridanga :

Matras	1	2	3	4	5
Theka :	Dhā	—	Dhā	Ge	Ti
or	Dhā	—	Dhit	Ta	—
or	Dhā	—	Dhit	Ta	—
Tala marks.	X		2		

Matras	6	7	8	9	10
Theka :	Ta	Kida	Dhā	Ki	Ta
or	Kat	—	Dhā	Ki	Ta
or	Kat	Tita	Kata	Gadi	Gina
Tala Marks	0		3		

(B) As played on Tabla.

Matras:	1	2	3	4	5	6	7	8	9	10
Theka:	Dhee	Na	Dhee	Dhee	Na	Tee	Na	Dhee	Dhee	Na
Tala Marks	X		2			0		3		

(Compositions in Jhaptala are sometimes called Sadhras in the parlance of professional musicians.)

VII Chau Tala, 12 Matras, played on Mridanga and used in Dhruvapadas.

Matras	1	2	3	4	5	6
Mnemonics	Dhā	Dhā	Din	Tā	Tita	Dhā
Tala Marks	X		0		2	

Continued

Matras	7	8	9	10	11	12
Mnemonics	Din	Tā	Tiṭa	Kata	Gadi	Gina
Tala marks	0		3		4	

VIII Eka Tāla, 12 Matras played on Tablā and used in Khāyals of Vilambit, Madhya and Druta Laya.

Matras	1	2	3	4	5	6
Thekā	Dhin	Dhin	Dhāge	Traka	Too	Nā
Tala Marks	X		0		2	

Continued

Matras	7	8	9	10	11	12
Theka	Kat	Tā	Dhage or Dhin	Traka	Dhee	Nā
Tala Marks	0		3		4	

IX Dhamār Tala, 14 Matras played on Mridanga and used in the compositions known as 'Horis' in which the colour sports of Lord Sri Krishna are described.

Matras	1	2	3	4	5	6	7
Mnemonics	Ka	Dhee	Ṭa	Dhee	Ta	Dhā	—
Matras	8	9	10	11	12	13	14
Mnemonics	Ga	Ti	Ṭa	Ti	Ṭa	Tā	—
Tala Marks		—			—		

X. Soola Tala, 10 Matras played on Mridanga and used in compositions of the Dhruvakanda style.

Matras	1	2	3	4	5	6	7	8	9	10
Mnemonics	Dhā	Dhā	Din	Tā	Tita	Dhā	Tita	Kata	Gadi	Gina
Tala marks	X		0		2		3		0	

(Cf. Chaturasra Jati Mathya Tala of Karnatak Sangeet.)

XI. Soolafakta Tala or Surfaktā Tala ; 10 Matras played on Tabla and used in compositions of the Khayāl style.

Matras	1	2	3	4	5	6	7	8	9	10
Theka	Dhin	Dhin	Dhā	Traka	Too	Na	Dhin	Traka	Dhin	Ta
Tala marks	X		0		2		3		0	

This Tala has a form identical with that of the Soola Tala. But its Mnemonics are those of Tabla and it is played on Tabla with Khayal types of songs.

XII. Jhoonura Tala, 14 Matras played on Tabla and used with slow Khayals.

Matras	1	2	3	4	5	6	7
Theka	Dhin	Dhā	Traka	Dhin	Dhin	Dhāga	Traka
Tala marks	X			2			

Matras	8	9	10	11	12	13	14
Mnemonics	Tin	- - Tā	Traka	Dhin	Dhin	Dhaga	Traka
Tala marks		0		3			

XIII. Deepchandi Tala or Chachad Tala, 14 Matras, played on Tabla and used with compositions known as 'Holis' which, like 'Horis' of Dhamra Tala, are compositions in which the colour sports of Bhagwan Shri Krishna are described. This tala is also used in Thumries, Bhajans and light songs now-a-days.

Matras	1	2	3	4	5	6	7
Theka	Dhā	Dhin	—	Dhā	Ge	Tin	—
Tala marks	X			2			

Matras	8	9	10	11	12	13	14
Theka	Tā	Tin	—	Dha	Ge	Dhin	—
Tala marks	0			3			

Sometimes this very tala is extended to sixteen Matras as under :

Matras	1	2	3	4	5	6	7	8
Theka	Dhā	—	Dhin	—	Dhā	Ge	Tin	—
Tala Marks	X				2			

Matras	9	10	11	12	13	14	15	16
Mnemonics	Tā	—	Tin	—	Dhā	Ge	Dhin	—
Tala marks	0				3			

(This is considered to be a variation of Tritala.)

XIV. Ada–Chautala, 14 Matras played on Tabla and used with slow as well as medium and fast Khayals.

Matras	1	2	3	4	5	6	7	8
Mnemonics	Dhin	Traka	Dhee	Nā	Too	Nā	Kat	Tā
Tala marks	X		2		0		3	

Matras	9	10	11	12	13	14
Mnemonics	Traka	Dhee	Nā	Dhee	Dhee	Nā
Tala marks	0		X		0	

XV. Tilwada (a form of Tritala) 16 Matras played on Tabla in very slow tempo (Ati Vilamba Kala) and used with Vilambit Khayals.

Matras	1	2	3	4	5	6	7	8
Mnemonics	Dhā	Tirakrita	Dhin	Dhi	Nā	Nā	Tin	Tin
Tala marks	X				2			

Matras	9	10	11	12	13	14	15	16
Mnemonics	Tā	Tirakita	Dhin	Dhi	Nā	Nā	Dhin	Dhin
Tala marks	0				3			

(This is a form of Tritala itself.)

XVI. Tritala, 16 Matras played on Tabla and used in Khayals of medium as well as of fast tempo.

Matras	1	2	3	4	5	6	7	8
Mnemonics	Dhā	Dhin	Dhin	Dhā	Dhā	Dhi	Dhin	Dhā
Tala marks	X				2			

Tritala in medium tempo contd.

Matras	9	10	11	12	11	12	13	14
Mnemonics	Dhā	Tin	Tin	Tā	Tā	Dhin	Dhin	Dhā
Tala marks	0				3			

Fast tempo

Matras	1	2	3	4	5	6	7	8
Mnemonics	Nā	Dhin	Dhin	Nā	Nā	Dhin	Dhin	Nā
Tala marks	X				2			

Matras	9	10	11	12	13	14	15	16
Mnemonics	Nā	Tin	Tin	Nā	Nā	Dhin	Dhin	Nā
Tala marks	0				3			

There are a dozen or so more Talas such as Matta Tala, Mani Tala, Shikhara Tala, Chakra Tala, Jagpāla Tala, Vasant Tala, Brahma Tala, Lakshmi Tala, Rudra Tala, Ganesh Tala, Chitra Tala.

Matta Tala	—18 Matras	Vasant Tal	—18 Matras
Mani ,,	—11 ,,	Brahma ,,	—14 ,,
Shikhari ,,	—17 ,,	Lakshmi ,,	—18 ,,
Jagpāla ,,	—18 ,,	Rudra ,,	—11 ,,
		Chitra ,,	—15 ,,

In the Talas of the Karnatak system the syllables supposed to be produced on the Mridanga are Ka, Kha, Ga, Gha, ja, jha, Ta (Murdhanya), Da (Murdhanya), Dha (Murdhanya), Na (Murdhanya).

Ta (Dantya), Tha (Dantya), Da (Dantya), Dha (Dantya).

Na (Dantya), Ma, Ya, Ra, Kra and Tra.

Some of the word combinations of these syllables are :—

Taka, Dimi, Kita, Kina, jaka, Thinya, Thakita, Thimita etc.

These words permuted and combined in rhythmic figures simple and complex make the Mridangam performance interesting and entertaining indeed! A wonderful feature of the Mridangam recital is that the Mridangam player, as it were anticipates the rhythmic figures in Sargama or Tanams produced by the vocal and instrumental musician or, perhaps he has himself learnt by heart, the rhythmic figures or, by constant practice of accompaniment with the vocal and instrumental musicians, is conversant with them, so that the rhythmic variations (improvisations) both of the vocalist, violin player and Veena player as well as the Mridanga player go on hand in hand, simultaneously and identically which makes the total effect very entertaining.

But I have not come across in the Mridangam playing of Karnatak Sangeet anything like Gat-Parana which is the charm of the art of Mridanga and Tabla playing of Hindustani music. Just as the great master-musicians of the past ages of Hindustani music have composed and left behind a rich treasure of musicial compositions as models of the Raga forms, great masters of Mridanga and Tabla such as Kudao Singh and Mana Sahib Panse for Mridanga and Natthu Khan, Munir Khan for Tabla have composed and left behind a rich treasure of compositions

of the mnemonics of Mridanga and Tabla and models, and just as vocalists and instrumentalists have to learn by heart the respective traditional compositions left behind by the great masters of the past ages the Mridanga and Tabla players also have to memorise the traditional Gats and Bol-Parans composed by the past great Masters. I do not know if such compositions of the Mridanga, Ghata Vadya, Khanjara etc. are available in Karnatak Sangeet. Those of Hindustani music are very interesting, highly artistic and instructive. Lots of these have appeared in the Tabla and Mridanga Ankas of 'Sangeeta' the music journal issued by "Sangeet Karyalaya", U.P. and also in text-books on Tabla and Mridanga published by the Tabla and Mridanga experts of today such as the late Govindrao Guruji of Burhampur, Sakharamji Gurava of the Bhatkhande College of Hindustani Music, Lucknow, U.P., and Shri Godbole of Allahabad. These compositions are worth learning as recited by mouth and then as played on the Mridanga and Tabla. They are, some of them, very good models of complex rhythm.

The syllables used in the Thekas (set compositions of the mnemonics of Tabla and Mridanga) as well as in the extempore rhythmic improvisation are almost the same as those used on the Mridanga of Karnatak Sangeet. The syllables 'ja' and 'gha' do not occur. The syllable Dha (dental) is the most important. The Sama of Tala falls, in most cases, on this syllable. Ta, Ka, Ga, Gha; Ta, Da (lingual), Dha (dental), Na (dental), Ma, Ra, La are the syllables used on Mridanga and Tabla. Dhita, Tita, Kita, Tiri, Kida, Naga, Dhilanga, Tin, Dhin, Dhuma, Taka, Taka, Ta, Ghida are some of the words formed out of these syllables. Ths Thekas and Bol-Parans of the Talas of Hindustani music are composed by permutations and combinations of the words set to figures of rhythm simple and complex.

A Karnataka Gayak and Mridanga Vadak has to account for every Matra of his Tala. Even the Gayak goes on counting his matras on his fingers, as he sings. Not so a Hindustani Gayak, unless he is demonstrating, with purpose, some play of rhythm. With a Vilambit Khayal the Tabla player is neither expected nor permitted to show off any extempore patterns of rhythm. In the case of Druta Khayals and Taranas he is sometimes allowed and even expected to do some extempore rhythm

improvisation on the Tabla but that, in keeping with the general run of the extempore work of the singer. In the case of Instrumental music played on the string instruments such as Sitar, Sarod, Sur-Bahar the Tabla player gets full scope to demonstrate his art. In fact, besides accompanying the instrumentalist in his extempore improvisations, the Tabla player is given a separate turn to play his Gat Parans, the instrumentalist playing only the opening round of his Gat on his instrument in the form of a Lahra, which is a musical composition covering just one round of a Tala, a sort of marking of the Tala, set to svaras of some Raga, by the Sitar or Sarod player. It is a kind of Sawal and Jawab (question and answer) between the instrumentalist and his drummer. This system of alternate turns between the Sitar and Sarod player and his Tabla player is very interesting and entertaining.

A recent development in these programmes of Hindustani Vadya Sangeet is what they call a Jugabandhi. These are duets between a Sarod and a Sitar to which is added the Tabala. To the general public these Jugabandhis appeal very much and they have become very popular. The Sarod player and Sitar player play their own individal passages of the Raga alternately and then the Tabala player follows with his own extempore elaborations of the memoirs in an endless variety of rhythmatic figures.

The solo performances of the Mridanga, Tabla, Dholak etc., are wonderful and entertaining as those of the Mridanga of the South. Apart from the rhythmatic figures which are known as Gaidas, Peshkars, Laggas, Relas etc., which are properly speaking the exercises meant to give a practice to the palms and fingers of the two hands they play what they call Gat Parans which are compositions of the mnemonics of the drums composed by great masters of the past ages, as models in the same ways as the Varnams, Kritis, Dhrupads, Khayals, Thumries etc. in vocal music. These are, of course, not improvised with extempore Ragams and Tanams, Alaps and Barbats as the Kritis and Khayals. They are just recited by mouth and followed by their reproduction on the Tabala. Ahmedjan Thirakwa, Allah Rakkha, Shanta Prasad alias Gudai Maharaj, Kisan Maharaj, both of Banaras are some of the leading exponents of the art

of Tabla playing. All these give solo performances as well as in play in accompaniment to string instruments such as Sitar, Sarod, Sur Singar, Sur Bahar. Some of these play in accompaniment to dance also.

The art of Mridanga playing is falling into the background nowadays as Dhrupads and Horis. There are hardly half a dozen good Mridanga players in the North. Two styles of Mridanga playing are recognised, namely that of Kudav Singh and the other one of Naina Sahib Pause. Both these great masters lived in the last centuries and invented unique styles of their own, respectively. These styles are recognised as the standard styles of the art of Mridanga playing in the North.

THE PLACE OF RHYTHM IN ART

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It has been said that Rhythm is the basis for all natural phenomena and that all world-processes follow the Law of Rhythm. A little thought will show that there is much truth in this statement. Every process involves movement and movement involves time and space. Even the so-called dead matter is found in final analysis, to be only a bundle of energy. The so-called physical atom, the root-basis of all matter, is found to be but a bundle of electric discharges. So the ultimate basis of everything, living or 'dead', is vibration. Vibration in its turn involves the idea of time, space and movement. And Rhythm is only ordered movement in time and space. We thus see the basic value and significance of Rhythm. Ordered movement in any kind of phenomena is the fundamental basis. We thus realise the basic value of Rhythm: Laya, vibration, ordered movement. There may be all kinds of movement, but only ordered, disciplined, well planned movement can fit in with the basic Laws of Nature.

It is usual to speak of Sruti as the mother and Laya (Tala) as the father of Music. This is very significant. The mother nourishes the child, pours all her love on it and makes it grow. But if all this is undisciplined, the result may be very disastrous to the child. The father comes in to discipline the process of growth, thereby ensuring safe and ordered growth. In Music Tala comes in to discharge the function of the father and ensure its fulfilling its true purpose.

The value of rhythmic measure and its effect on our ears will be obvious if we just think over it. Rhythm can work out wonders, if properly utilised. Nature responds to rhythm always. We see how a child is lulled to sleep if rocked in a swing rhythmically ; I have heard friends say that the regular ticking of a clock induces sleep. I have myself seen that in a steam-boat, the regular sound in the motor induces sleep. It is known to students of science that a violin bow, kept at a parti-

cular tension, can break a glass tumbler if gently drawn across the edge. We know that there is an army-rule that when soldiers march in ordered gait, they are asked to break the regularity when they cross a bridge ; because the rhythmic movement may under certain conditions cause the bridge to break into pieces. There is an unmistakeable psychological effect for rhythm in life This property of Rhythm is fully exploited in our Dance Art. Required bhava (emotion) can be evoked by the use of appropriate rhythm. Thus we see what an important part Laya (Tala, time-measure) plays in our music. I have heard that there was a Maharaja of Cochin who could enjoy the play of drum (Chenda) for hours and hours, at times a whole night. For this purpose Tala instruments have been introduced in our music as an essential feature ; without them concerts may tend to lose charm. Especially in the music of the South, these Tala instruments play an important part ; they are almost indispensable.

Rhythm can be produced by regulated beats, either with hands or metal cymbals or by beating a stick with another. But these will lack an intrinsic musical quality. If sweet sound also can go with the rhythmic sound, it will enhance the effect tremendously. Hence the percussion instruments were devised to supply melodic background to the orderly beats. They are tuned to the sruti of the musician, and when they are played there is a background of sweet sound to all the various rhythmic patterns. Hence the importance of our percussion instruments.

PERCEPTION OF RHYTHM

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The perception of time is a very fundamental factor in music. As a matter of fact, what we call sound is itself a rhythm. For it is a repetition in time of a pressure pattern.

However, usually by rhythm we understand only a pattern in time wherein a set of distinguishable phenomena occur at certain specified intervals, for in such fast repetitive patterns as of sound and light waves, the individual waves, though distinct, are not distinguished by the conscious mind. We shall examine this somewhat closely.

First, we note that rhythm is not merely 'externalized' objective division of time. For instance, the ticking of a clock is not a musical rhythm. The ticking of a clock or the rattle of a train can be represented by the following figure (Fig. 1. a.). Each dot represents a tick of the clock.

· · · · · · · · · · (a)

* · · * · · * · · (b)

But now see Fig. 1. b. The same ticks are there. But we have changed the quality of every third dot (or every third tick). We have introduced a pattern in this set of ticks. How and what have we achieved? First, we changed the quality of a tick at a specified interval. Secondly by doing so, we have focussed our attention at these instants and kept the others in the background. If we did not do this, all the ticks would be alike and no pattern or *cchanda* is produced. Therefore, rhythm essentially is not a mere division of time but a *recurrence of attention*. By arranging this recurrent points of attention we create various *tals*. Take for instance the dots in Fig. 2. a.

They are a regular set of ticks, all alike.

· · · · · · · · · · · · (a)

* · · * · · * · · * · · (b) —*dadra*

* · * · · * · * · ·· * · (c) —*jhap*

* · · · * · · · * · ···· (d) —*keharva*

Fig. 2. It may be noticed that by emphasising various instants, the following '*talas*' have been constructed: *dadra* (*tisra-eka*), *jhap* (*tisra-rupaka*), and *keharva* (chaturasra-eka).

The other three (Fig. 2. b, c, d) are patterns made out of the same ticks by emphasizing different instants. The careful reader may note that we have produced the basic patterns of *dadra*, *jhap* and *keharva* of Hindustani music. All of us have played this game of creating different '*tals*' while sitting in a train and listening to its rattle on the iron rails.

Again notice that since attention is a psychological factor rhythm is highly subjective and not a mere objective division of time. We meet a similar phenomenon in pitch, loudness, etc Like them rhythm is often affected by personal factors and hence cannot be measured by only a physical clock. One must have noticed how slowly time moves when one is waiting for a train that is already late. How quickly time flies when one is answering an examination paper! The clock, however, is indifferent to one's feelings and goes on with its ticking. Also, it is known that intervals less than 1 sec. (by the clock) are perceived as more than 1 sec., and intervals more than 1 sec. are perceived as less (subjectively).

Just as sounds too close in pitch cannot be distinguished, so also tones coming too fast after one another cannot be perceived as different. It is estimated that sounds separated by less than 1/20 sec., are not perceived as distinct. Also it is found that there must be about ½ sec. between two sounds to give a sensation of a pause. For the perception of rhythm, beats must be at the slowest 3 beats in 2 seconds and at the fastest, about 8 beats per second.

The flow of time has first to be calibrated. This calibration is what is called the *laya* or tempo. For, if the unit of calibration is small we feel the passage of time as quick; this is the *drut* If the unit of calibration is large we feel the passage of time as slow; this is the *vilambita*. Thus, *laya* is the process of calibration of time.

We have already seen that rhythm is a periodic concentration of attention. We may also say that rhythm is a process in which nuclei of attention are separated by undivided parts of time. This undivided part of time is what we call a *matra, akshara* and so on.

To create the nucleus of attention certain acoustic adjuncts are used; these are the claps, strokes, etc. Further, all these adjuncts are 'instantaneous' and the more instantaneous the nucleus, the clearer the rhythmic feeling.[1] Otherwise the rhythm is not sharp and becomes difficult to grasp; the 'rhythm' becomes loose, though it may retain a certain proportion as in *alap*. Notice again, that noises are instantaneous and hence they are used as the acoustic adjuncts for breaking the current of time. Claps of hands, strokes of bells and sticks are all noises. Most important is the fact that consonants are noises. Hence it is that they are used in *layakari* or *layavinyasa*. Same is the case with plucking the string, change of bow, etc. The truth of these statements may be observed by trying to create rhythmic patterns (*layavinyasa*) with only vowels, without plucking or without changing the directions of the bow. We may call these acoustic adjuncts which quantize time, as the *terms* in a rhythmic cycle or *tala*. Various rhythmic patterns are created by arranging these terms in various ways. *The tala is, therefore, a cyclic arrangement of terms in a definite pattern.* Each cycle of such a repetitive pattern of terms is the *avarta*.

In an *avarta* there are grades of accentuation of terms. That is, by making the sound different in quality, pitch, loudness or even silent, a given term is emphasized. Such an emphasis attracts the attention more than others. We may note here the various orders of emphasis or accent :—

1. *Primary*: This instant is the most emphatic. It is the beginning and the end of the *avarta*. Acoustically it is the most emphasised and is called the *sam* or *padagarbha*. This is done, for instance by playing louder sounds like *dha* or *dhin* etc., though exceptions may be found as in *rupak tala* of Hindustani music. The song, *alap*, etc., are also so composed that their emphatic note falls on the *sam*.

Like the tonic in melody, the mind constantly tries to reach this instant, in an effort to relax. Tension is created the moment the rhythmic cycle (*avarta*) is started and is released only when the cycle is completed. The *sam* is, therefore at once tension-creating and tension-releasing.

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1. Cf. B. C. Deva, Transitive Elements in Music, *Nada Rupa*, Vol. 2. No. 2, 1963 (Banaras Hindu University).

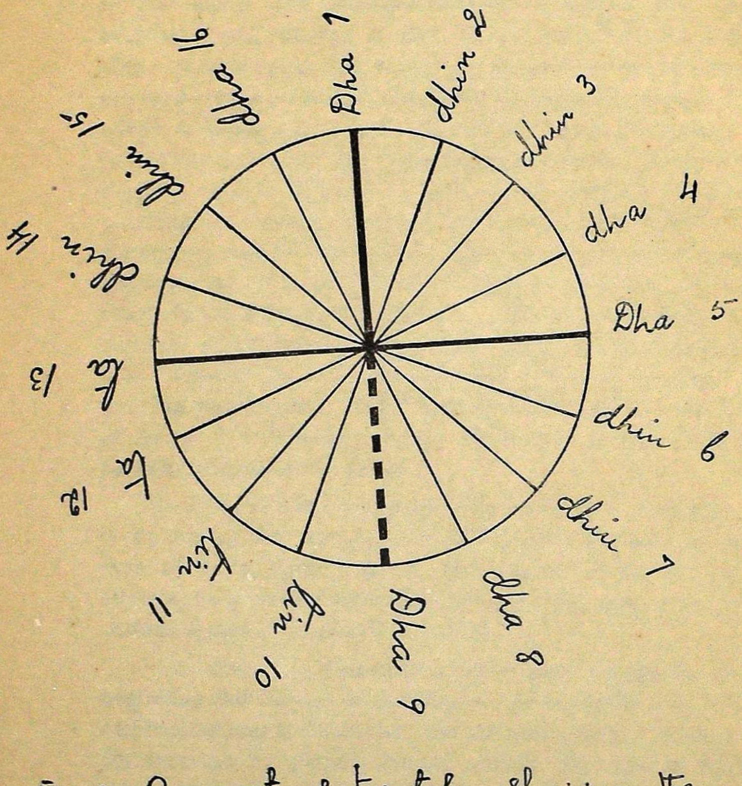

Fig. 3. One avarta of tri-tal, showing the primary (1), secondary (9) and tertiary (5, 13).

2. *Secondary* : This instant is the next in importance to *sam*. It is often called the *khali* or *khal*. We may say that this is in 'opponence' to the primary accent. For it relaxes the pattern starting from *sam* and also begins the next part of the cycle when the arrival of the primary accent is indicated. The tension created immediately after the primary term very slowly relaxes. When *khali* is reached the tension is very low ; but the *khali* also starts to build up an expectation of the *sam* during the second half of the cycle. The *khali* therefore, is at once a tension-releasing and tension-creating term. This secondary accent need not be necessarily the first stroke of the second half of the *avarta*. For instance in *rupak* the 4th matra may be called the secondary accent, for it starts our expectation of the *sam*.

3. *Tertiary*: These are next in order of accent. They indicate various parts of the *avarta*. The first stroke of each *khanda* in a *tala* is of this type.

To give an example, consider the *trital* (Hindustani music) :

Dha	*dhin*	*dhin*	*dha*
1	2	3	4
dha	*dhin*	*dhin*	*dha*
5	6	7	8
dha	*tin*	*tin*	*ta*
9	10	11	12
ta	*dhin*	*dhin*	*dha*
31	14	15	16

The *Dha* (first stroke) is the most emphatic and is the primary term. Strokes 5 and 13 are the *tertiary*. Stroke 9 is the secondary. It is of interest to note that the three strokes following are soft. They seem to indicate a relaxation as well as anticipate the impending tension. This is further emphasized by the tertiary 13 which is played as *ta* and not *dha*. (See Fig. 3).

Here the regularity of the temporal division is kept in the background, imposing on it expectation and relaxation. Strokes and rhythmic attentions 'overflow' the temporal divisions, crossing over the regular boundaries of the normal divisive units.

Other orders of accents may also be thought of. These are other strokes of the *tala* and the various accents developed in *bols*, *parans*, *sol kattus*, etc.

THE PANCHAVADYA

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We are familiar with two kinds of orchestral music. In one the *gānavādyas* or stringed and wind instruments for playing songs predominate, and music is played to the accompaniment of one or more tālavādyas. In the other the *tālavādyas* or instruments of percussion for keeping time form the main constituents, and talas are ramified and elaborated. The Vādyavṛnda of the All India Radio is an example of the first and Tālavādyakkacceri an example of the second. The *Pañcavādya* is an orchestra belonging to the latter type. It is a group of percussion and wind instruments used in the temples of Kerala and may be said to be indigenous to that region. As its name indicates, it consists mainly of five instruments.

Strictly speaking, there are two kinds of Pañcavādyas, the components of the one slightly differing from those of the other. One is called *Kriyāṅgapañcavādya* and is associated with the routine ritual of the temple, and is to be played according to specific rules during the various services in the course of the day. The other can be called *Sevāṅgapañcavādya* and is played during the ceremonial processions of the deity; it is, therefore, connected with Utsavas.

The principal instrument in both these types is the *avanaddha-vādya* or membranophone called *Timila* which is the most important and most sacred instrument in the temples of Kerala. Among the subordinate instruments common to both are the *ghanavādya* or autophone called *Cēṅṅila* and the *Suṣiravādya* or aerophone called *Śaṅkhu.*

The *Timila* is a two-faced drum about three feet long. Its body is a jackwood barrel broad at the ends and tapering towards the middle. The diameter at the mouths is about half a foot. Each mouth is covered by goat-skin of medium thickness fixed to a cane ring a little larger than the mouth and these two are well secured by interlacing a cord between them. The tension is increased by tying another cord around the middle. The portion

of the skin stretching beyond the periphery of the mouth, therefore, slants down a little. The drum is suspended over the shoulder and played with both the hands on one face. The *Cēṅṅila*, or 'chermangalam' to give its earlier and fuller name, is the same as the semakkalam of the Tamil parts. It is a circular gong made of bell metal or bronze. It is held in the left hand with a string passed through a hole at its edge and played by striking with a stout stick. The *Śaṅkhu* is the conch. It is played by blowing a uniform stream of air into it through a small orifice made in its spiral at its head.

In the Kriyāṅgapañcavādya, the two other instruments making up the number five are the *Vīkkuceṇṭa* and *Kaimaṇi*. The *Vīkkuceṇṭa* is a cylindrical wooden drum about two feet long and about ten inches in diameter covered on each side by a cap of thick leather fixed on a wooden ring. These two caps are held together by interlacing a thick cord between them as in the case of the Timila. This is also suspended over the shoulder and played by beating on one face with a stick. This is called 'Vīkkuceṇṭa' because the Malayalam word *vīkku* means 'to beat' and this is played by simply beating it with the stick to show the angas of the tala, unlike the other variety of Chenda called *Uruṭṭuceṇṭa* used in Kathakali which has got a thinner, treated skin held in greater tension and which is played by the appropriate rotation on its face of two sticks one held in each hand, the Malayalam word *uruṭṭu* meaning 'to roll or rotate'. The Vīkkucheṇṭa is in some places substituted by *Karaṭi* which is not much different from it in appearance or sound. The *Kaimaṇi* is the same as the Jalara of the Tamils and is a pair of metallic cymbals played by striking the one against the other and used for indicating the tālāṅgas.

Though this Pañcavādya has thus five components, in practical use the Kaimaṇi is dispensed with except on special occasions. The conch is blown only at the commencement. So only Vīkkuceṇṭa, Timila and Cēṅṅila are played throughout. In the Timila both the *Saśabdakriyā* and *Niśśabdakriyā* of the talas are played while in the Vīkkuceṇṭa and Cēṅṅila only the Saśabdakriyā or beats are struck.

The Kriyāngavādya is used for the abhiṣeka, Śrībhūtabali and the procession of the deity within the temple prākāra in the morning, noon and night in the daily service and for special rituals like Utsavabali, Aṣṭabandhana etc. The tālas are peculiar and they vary with the occasion and the deity. For example during Śrībhūtabali five tālas are prescribed, namely *Mūṇām tālam*, *Muṭakku tālam*, *Takaṭu tālam*, *Añcām tālam* and *Eka tālam*. *Mūnam tālam* is of seven mātras and consists of one pluta and two gurus. *Muṭakku tālam* has five mātras and its aṅgas are guru, laghu, guru. *Takaṭu tālam* consists of three gurus and so has six mātras. *Ancām tālam* has nine mātras and its aṅgas are one pluta, two laghus (one niśśabda and one saśabda) and two gurus. *Eka tālam* has a laghu of one mātra. During pradaksina, for the first round the tala is *Raṇṭām tālam* of three mātras consisting of one laghu and one guru, for the second either this or ekatala, for the third *Śambhu tālam* of three mātras with the aṅgas two drutas and one guru, and for the fourth, if any *Śakaṭu tālam* of four mātras having two laghus and one guru. The playing of Timila in such tālas is known as '*Pāṇikoṭṭu*'.

The Sevāṅga Pañcavādya is the more important and this is what is popularly called Pañcavādya. This is played only during festivals and it may be said to correspond to the ritual of *Sarvavādyam* found in some of the important temples of Tamilnad ; but there is this difference namely that while vocal music and dancing figure in the Sarvavadyam, they are entirely absent in the Pañcavādyam.

Besides the three instruments common to the Kriyāṅgapañcavādya, namely Timila, Ceṅṅila and S'aṅkhu, the principal constituents of the Sevāṅgapañcavādya are *Eṭakka* and *Maddalam*. In addition to these five pradhāna vādyas or primary instruments of the group, certain upavādyas or auxiliary instruments are also found in use. Of these, the *Kompu* or horn is invariably present and sometimes also the *Kuzhal* or pipe. We also find in modern practice the Cēṅṅila substituted by *Elattālam*. This is the same as *Brahmatālam* described in old works on music and it is a pair of large-sized cymbals heavier than the Kaimaṇi and with a louder and more chiming sound.

The *Eṭakka* like the Timila, is an instrument peculiar to Kerala. Its body also is of jackwood about a foot and a half long, and has the appearance of a pair of hollow cones, with a diameter of about half a foot at the base, placed apex to apex and fused together. Each end is covered by thin goat-skin mounted on a circular wooden frame of about one foot in diameter. These two are held in position on the body by interlacing a cotton cord between them and by tying round another cord at the middle of the instrument. The tension in the cords is just enough to keep the skin in firm contact with each face and so, though the skin extends beyond the mouth of the body for an annular space about three inches wide, it remains erect and does not slant down there as in the case of Timila. As an additional means of keeping the skin in such position, sometimes a few cylindrical strips of wood are placed near the mouth and the cord passed round them. The instrument is suspended over the shoulder or tied to the waist horizontally and played with a slender stick on the right face. Its sound is tender and it is possible for the performer to vary the pitch of the sound by adjusting the tension on the cord by suitably pressing on it in the middle with the left hand, and thus produce the various notes and use the intstrument as a simple Gānavādya. But in the Pañcavādya it is used only as a Tālavādya.

The *Maddalam*, also called *Vīramaddalam*, is very much like the Mridangam, but larger in size. It is tied to the waist horizontally and played with both hands, one on each face. While in the Mridangam a small quantity of flour paste is applied to the left head at the time of performance for toning the sound, this is dispensed with in Maddalam so that its sound is somewhat sharp.

The *Kompu* is a metal horn about three feet long curved in the form of a semicircle. Its width is about an inch at the end where the air is blown into from the mouth and it gradually increases to about three inches at the other end. The *Kuzhal* also called *Kurumkuzhal* is a small-sized Nāgasvaram about a foot and a half long.

As already stated, this Sevāngapañcavādya is not so intimately connected with the temple ritual as the Kriyānga-

pañcavādya. But it has an almost indispensable position during temple festivals particularly in the northern parts of Kerala. The principal occasion when it has got a significant place is the ceremonial processions of the deity with all the paraphernalia during the major annual festivals. In certain temples particular days of the Utsavam are allotted for Pañcavādyamela. Generally, it is not played during all the rounds of the procession but only during one, usually the first or second. This particular pradakṣiṇa is called *Eṭakkāpradakṣiṇa* probably in view of the presence of the important instrument Eṭakka in the group.

The Pañcavādyamela commences with the blowing of the conch. The Eṭakka is then sounded. The Timila joins it and then the Maddalam. The tala commonly used is the *Tripuṭa* of seven mātrās. This is practically the same as the Tiśrajāti Tripuṭa of South Indian concert music, but the aṅgas are here taken as one pluta and two gurus, the pluta having three mātrās and the gurus two each. The tala is played first in the vilambita kāla, then in the madhya kāla and finally in the druta kāla. The Kompu is blown at intervals in keeping with the tāla. The conch is sounded now and then. The Kuzhal, if used, is played intermittently. The sounds of the different instruments produce a harmonious chime. When the rendering of the tala is completed in *trikāla* in a particular *gati*, usually the *chaturaśra* to begin with, it is played again in a different *gati*.

There is a more elaborate form of playing the Pañcavādya in the Eṭakkāpradakṣiṇa. In this soon after the conch is sounded, one round of the tāla called *tālavaṭṭam*, which generally consists of eight units of the tāla, is played on the Eṭakka, then it is rendered on the Timila and then on the Maddalam. After the first tālavaṭṭam, the sarvalaghu alone is beaten on the Eṭakka and the elaborations of the tala are made alternately in the Timila and the Maddalam. The accessory instruments are suitably played along with them. At the close of the drutakāla the instruments are played together. The whole process may then be repeated in a different gati of the tāla.

Although theoretically the tala is tiśrajāti tripuṭa, in actual practice sometimes a tālavaṭṭam which consists of eight

tripuṭavaṭṭams in the vilambita kāla is taken as seven Āditāla-vaṭṭams since the duration will then be the same, being fiftysix akṣarakālas. This is called '*cempaṭavaṭṭam*'. At the close of each kāla in a particular gati also there is often what is called '*iṭakkalāśam*' during which the instruments are played together thus marking the stage of the tala passing to the next kāla. This is sometimes more prominently indicated by the āvartas immediately preceding and following the iṭakkalāśam being played in the Maddalam alone.

The number of each instrument in the Pañcavādya can be increased. Usually the Timila is found to be not less than three in number. Groups having eleven Timilas, five Maddalams, eleven Elattālams, ten Kompus etc., are not uncommon. In playing these each instrument group is taken as one unit, that is, the Timilas are played together and the Maddalams are also played together. Occasionally the āvartas are also repeated in one member after another in each of the groups.

The Pañcavādya is always played with the players standing.

The association of Pañcavādya with temple ritual seems to be very old. Some Tantric works in Kerala make mention of it. In the old Sanskrit work named *Uḍḍīśamantrodaya* many of these instruments are mentioned by name and the ritualistic details pertaining to the use of Eṭakka and Timila are given. This shows the sacredness of the Pañcavādya.

TWO NEW KRITIS OF SRI MUTHUSVAMI DIKSHITAR

"Svetaranyesvaram" in Arabhi & Brahmavidyambike in Kalyani

Edited by VINA VIDWAN A. SUNDARAM IYER

॥ आरभिरागे आदिताळेन गीयते ॥

पल्लवी - श्वेतारण्येश्वरं भजेऽहम्
सदा ब्रह्मविद्यानायकीसहितम् ॥ श्वे ॥

अनुपल्लवी - वेदागमविनुतवैभवम्
विधिगुरुगुहसन्नुतप्रभावम् ॥ श्वे ॥

चरणम् - श्वेतारण्यक्षेत्रविलसितम्
श्वेताम्बरादिधरं सुरनतम्

मध्यमकालसाहित्यम् - भूतादिसेवितं शंकरं शशिधरं
भिक्षाटनवेषधरम् ॥ श्वे ॥

॥ कल्याणिरागे आदिताळेन गीयते ॥

पल्लवी - ब्रह्मविद्याम्बिके श्रीश्वेतारण्येशनायिके
श्रीशिवे संरक्ष मां श्री ॥ ब्र ॥

समष्टि चरणम् - ब्रह्मानन्दगुरुगुहजननि
परब्रह्मस्वरूपिणि नळिनि

मध्यमकालसाहित्यम् - सोमशेखरशोभितवदने
सुरनरमुनिगणसुखकरनयने
कामकले कम्बुजयगळे
कल्याणि सकलनिष्कळे ॥ ब्र ॥

1. श्वेतारण्येश्वरम्

29. ॥ आरभिरागे — आदितालेन गीयते ॥

आरोहणम् : स रि म प ध सां अवरोहणम् : सं नि ध प म ग रि सा

/4	O	O
पल्लवी		
सां ; सं नि ध प पा ध प म ग री ;	री सा ; सा	स नि धा सा री
श्वे ता . . . र . . . . ण्ये	श्व रं भ	जे . . ह म्
सं नि ध रिं सं नि ध प पा ध प म ग री ;	री सा ; सा	स नि धा सा री
श्वे . . . ता . . . र . . . . ण्ये	श्व रं भ	जे . . ह म्
सा धा ; सं नि ध रिं सां मं गं री	सां ; ध रि सं नि	धा पा म प ध रिं
स दा ब्र . . . ह्म वि . .	ध्या ना . .	य कि स हि त म् ॥ श्वे ॥
अनुपल्लवी		
पा ध सं प धा प म ग री ; प म	पा धा सं नि धा	; रीं सां ;
वे . . दा . . ग . म वि .	नु त वै . .	भ व म्

/4	O	O
रीमंगं रीरीरीसां मपधरिं	संरिंसंनि धापा	पमपा धारीं
विधि. गुरुगुह स . . .	न्नु . त . . प्र	भा . वम् ॥श्वे॥
चरणम्		
धा ; पा ; ; पा ; पा	पामापामप	मपमग री ;
श्वे ता र ण्य	क्षे . त्र वि .	ल . सि . तम्
रीमगरी ; रीसा ; सा	रीसा ; री	पामा मपा ,
श्वे . . ता म्बरा दि	धरं सु	र न तम्
मध्यमकालसाहित्यम्		
धपमगरिमगरिसा , सद़्रिसा	सपमप धरिंसंनि	धपरिमापधरिं
भू . ता . दिसे . वितं शं . क रं	शशिधरं भि . क्षा .	टनवे . षधरम् ॥श्वे॥

2. " ब्रह्मविद्याम्बिके "

65. ॥ कल्याणि रागे — आदि तालेन गीयते ॥

आरोहणम् : स रि ग म प ध नि सं   अवरोहणम् : सं नि ध प म ग रि सा

/4	O	O
पल्लवी		
गा मा पा पा प ध प म गा री	सा ; – ; ;	; ; – नी री
ब्र . ह्म वि . . द्या . म्बि	के	श्री .
ग म प ध पा प ध नि ध प म गा री	सा ; – रि स नि ध	नि रि गा – ग रि नि रि
ब्र . . . ह्म वि . . . द्या . म्बि	के	. . . श्री . . .
ग ग म म धा नि रिं नि ध प म गा री	सा ; रिं सं नि ध	प म ग रि – रि गा रि
ब्र . . . ह्म वि . . . द्या . म्बि	के	. . . . श्री . .
ग म प ध ध नि रिं नि ध म ग रि गा ग रि	गासंनिधा–पा , धपमगारी	प म गा – गा री
श्वे . ता र . ण्ये . श ना . यि के श्री	शिवे . . सं . . र . . क्ष	मां . . . श्री ॥ ब्र ॥

/4	O	O
समष्टिचरणम्		
सां ; संनिनिध पाधनिधानी धपमग	गापम पनिधा	संनिधरिं रिंसंसां ,
ब्र ह्मा . . नं . . . . न्द् . . .	गु रु गु . ह	ज . न . नि . .
गां रिं गां रिं रीं पं मं गं रिं सां सं नि	धा नी री ;	निधपम गरीस
प र . . ब्र . . ह्म . स्व रू .	. पि णी	न . ळि . नि . .
मध्यमकालसाहित्यम्		
गा , म पापप पमगरि गमपा	मगपम धपनिध	संनिधनि - निरिंसां
सो म शे ख र शो . भि त व द ने	सु र न र मु नि ग ण	सु ख क र न य ने
; गां रिं सं नी रीं सं नि ध रिं सां	; नि रिं सं नि ध प	सं नि ध पा म ग रि
का म क ले क म्बु ज य ग ळे	क ल्. या णी .	स क ल नि ष्क ळे
		॥ ब्र ॥

1. " ச்வேதாரண்யேச்வரம் "

29. ஆரபி ராகம் — ஆதி தாளம்

ஆ : ஸ ரி ம ப த ஸ் ா   அவ : ஸ் நி த ப ம க ரி ஸ ா

/4	O	O
பல்லவி		
ஸ்ா ; ஸ் நி த ப பா த ப ம க ரீ ;	ரீ ஸ ா ; ஸ ா	ஸ நி தா - ஸா ரீ
ஶ் வே த ா . . ர ண் . . . யே	ஶ் வ ர ம் ப$_4$	ஜே . . ஹ ம்
ஸ் நி த ரீ ஸ் நி த ப பா த ப ம க ரீ ;	ரீ ஸ ா ; ஸ ா	ஸ நி தா - ஸா ரீ
ஶ்வே . . த ா . . ர ண் . . . யே	ஶ் வ ர ம் ப$_4$	ஜே . . ஹ ம்
ஸா தா ; ஸ் நி த ரி ஸ்ா ம் க்ரீ	ஸ் ா ; த ரி ஸ் நி	தா பா - ம ப த ரி
ஸ த$_3$ ா ப்$_3$ ர ம் . ம வி . .	த்$_3$ யாந ா . .	ய கீ - ஸஹித ம் (ஶ்வே)
அநுபல்லவி		
பா த ஸ் ய தா ப ம க ரீ ; ப ம	ப ா த ா ஸ் நி த ா	; ரீ ஸ் ா ;
வே . . த$_3$ ா . க$_3$. ம வி .	னு த வை . .	ப$_4$ வ ம்

/4	O	O
ரீ ம க் ரீ ரீ ரீ ஸா ம ப த ரி	ஸ் ரி ஸ் நி தா பா	ப ம பா தா ரீ
வி தி$_1$. கு$_3$ரு கு$_3$ஹ ஸன் . .	னு . த . . ப் ர	ப$_4$ா . வ ம் (ஶ்வே)
சரணம்		
தா ; பா ; ; பா ; பா	பா மா பா - ம ப	ம ப ம க - ரீ ;
ஶ்வே தா ரண் ய	க்ஷே த் ர - வி .	ல . ஸி . த ம்
ரீ ம க ரீ ; ரீ ஸா ; ஸா	ரீ ஸ ா ; ரீ	பா மா ம பா ,
ஶ்வே . தாம்ப$_3$ ரா தி$_3$	த$_4$ ர ம் - ஸு	ர ந த ம்
மத்யமகால ஸாஹித்யம்	O	O
த ப ம க ரி ம க ரி ஸா , ஸ த ரி ஸா	ஸ ப ம ப த ரி ஸ் நி	த ப ரி மா ப த ரி
பூ$_4$. தா தி$_3$ஸே . வி தம் ஶங் க ர ம்	ஶ ஶி த$_4$ரம் பி$_4$. க்ஷா	டனவே . ஷ த$_4$ ர ம (ஶ்வே)

2. " ப்ரம்மவித்யாம்பிகே "

65. கல்யாணி ராகம் — ஆதி தாளம்

ஆ : ஸ ரி க ம ப த நி ஸ் ா   அவ : ஸ் நி த ப ம க ரி ஸ

/4	O	O
பல்லவி		
க ா மா பா பா ப த ப ம க ா ரீ	ஸ ா ; - ; ;	; ; - நீ ரீ
ப்$_3$ர ம் ம வி . . த்$_3$யா . ம் பி$_3$	கே . .	. . ஸ்ரீ .
க ம ப த பா ப த நி த ப ம க ா ரீ	ஸ ா ; - ரி ஸ நி த	நி ரி கா - க ரிநி ரி
ப்$_3$ர ம் . ம வி . . . த்$_3$யா . ம்பி$_3$	கே	. . . ஸ்ரீ . . .
க க ம ம த ா நி ரி நி த ப ம க ா ரீ	ஸ ா ; - ரி ஸ் நி த	ப ம க ரி - ரி கா ரி
ப்$_3$ர ம் . . ம வி . . . த்$_3$யா . ம்பி$_3$	கே	. . . . ஸ்ரீ . .
க ம ப த த நி ரி நி த ம க ரி க ா க ரி	காஸ்நிதாபா,த பமகாரீ	ப ம கா கா ரீ
ஶ்வே த ா ர ண் யே . ஶ நா யிகேஸ்ரீ .	ஶி வே . . ஸ ம் ர . . க்ஷ	ம ா ம் . ஸ்ரீ (ப்ர)

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ஸமஷ்டி சரணம்		
ஸ்ா ; ஸ் நி நி த பா த நி தா , நி த ப ம க	கா ப ம ப நி தா	ஸ் நி த ரி ரி ஸ் ஸ்ா ,
ப்$_3$ ர ம் மா . . ன ந் . . . த$_3$ . . .	கு$_3$ ரு . கு$_3$. ஹ	ஜ . ன . னி . . .
க்ா ரி க்ா ரி - ரீ ப் ம் க் ரி ஸ்ா ஸ் நி	தா நீ ரீ ;	நி த ப ம - க ரீ ஸ
ப ர . . - ப்$_3$ர ம் ம ஸ் வ ரூ .	. பி ணி	ந . ளி . னி . .
மத்யம கால ஸாஹித்யம்		
கா , ம பா ப ப ப ம க ரி க ம பா	ம க ப ம த ப நி த	ஸ் நி த நி - நி ரி ஸ்ா
ஸோ ம ஸே க$_2$ர ஸோ . பி$_1$த வ த$_3$னே	ஸுர ந ர மு னி க$_3$ ண	ஸு க$_2$ க ர ந ய னே
; க்ா ரி ஸ் நீ ரீ ஸ் நி த ரி ஸ்ா	; நி ரி ஸ் நி த ப	ஸ் நி த பா ம க ரி
கா ம க லே கம் பு$_3$ஜ ய க$_3$ ளே	க ல் யா ணி .	ஸ க ல நிஷ் க ளே (ப்ர)

PROPRIETY OF DIVIDING AN OCTAVE INTO TWENTY-TWO SRUTIS*

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The traditional Indian practice is to recognize only twenty-two srutis in an octave. The number twenty-two in which the octave is divided by the ancients has remained unaltered in practice till now although satisfactory explanation is not found in the existing literature. This is perhaps why the division of the octave into twenty-two intervals has been considered arbitrary by many musicologists, who have written much against it.[1]

A logical explanation is given here which shows the significance of the number twenty-two in which the octave is divided on a nearly logarithmic scale. It is based on facts about which there can be no difference of opinion.

The author has devised a stringed instrument, named Automatic Musical Instrument,[2] which plays automatic accompaniment to vocal music. It works on resonance principle and so the strings of the instrument stop vibrating when the notes sung are out of tune. The instrument can therefore be used to see how accurately one can sing in tune, provided the strings of the instrument are tuned correctly according to the notes of the musical scale used. A method[3] has been developed for accurate tuning of the strings of the instrument according to a musical scale when various notes in the scale are related to each other by simple intervals. To see whether the method of tuning can be applied for tuning Indian musical scales, eleven basic scales, which cover about 170 Rāgas (melodic schemes) were chosen. The relative frequencies assigned to the notes of the scales were taken from the existing literature on the subject.[4]

It has been found that the method of tuning the strings can be applied to tuning all the basic scales. This is because the

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notes in these scales are inter-related to each other by the following simple ratios.

Frequency ratio	Sruti Interval
2/1	22
3/2	13
4/3	9
5/4	7

Sruti numbers—which are whole numbers—are used to show position of various notes in a scale. With these numbers intervals between various notes in a scale are easily known.

It therefore appears to the author that the intervals of 22, 13, 9, and 7 srutis are the basic intervals and the musical scales are built up from the keynote by raising and lowering the pitch in steps of these intervals.

Multiplication or division of relative frequency by a frequency ratio corresponds to increasing or decreasing the sruti number by corresponding sruti interval. This is possible provided the numbers 22, 13, 9 and 7 are proportional to the logarithms of 2/1, 3/2, 4/3 and 5/4 respectively, and actually it is very nearly so.

More exactly we get

$$\frac{22}{\log 2} = \frac{12.869}{\log 3/2} = \frac{9.131}{\log 4/3} = \frac{7.082}{\log 5/4}$$

Therefore, if octave is denoted by the number 22, then frequency ratios 3/2, 4/3 and 5/4 will have to be represented by 'log numbers' 12.869, 9.131 and 7.082 respectively. With this notation other frequency ratios obtained from the ratios 2/1, 3/2, 4/3, and 5/4 by multiplication or division, will be represented by addition or subtraction of corresponding 'log numbers'.

For example a frequency ratio $(\frac{3}{2} \times \frac{5}{4}) = \frac{15}{8}$ is shown by log number (12.869 + 7.082) = 19.951. Similarly a frequency ratio $(\frac{4}{3} \times \frac{4}{3} \times \frac{4}{3} \times \frac{4}{5}) = \frac{256}{135}$ is denoted by log number

(9.131+9.131+9.131—7.082) = 20.311

There is only one log number corresponding to any frequency ratio. However, representation of intervals by 'log numbers', as is seen, is equally complicated as the representation of intervals by frequency ratios or cyclic cents. The basic intervals are therefore, represented by nearest whole numbers instead of exact 'log numbers'. It is like three measuring rods 'A', 'B', 'C' whose actual lengths are 12.869, 9.131 and 7.082 but which are marked by numbers 13, 9 and 7 respectively.

Thus a length measured once by rod A in the forward direction and then once by rod B in the backward direction is actually = (12.869 − 9.131) = 3.738 units but is read as 13 − 9 = '4' units (srutis). It corresponds to a frequency ratio $(\frac{3}{2} \times \frac{3}{4}) = \frac{9}{8}$.

Similarly the actual length measured in the forward direction by rods A and C kept end to end = (12.869 + 7.082) = 19.951 but this length is read as (13 + 7) = 20 units. It corresponds to the frequency ratio $(\frac{3}{2} \times \frac{5}{4}) = \frac{15}{8}$

In the same way the actual length measured three times by rod B in forward direction and then measured once by rod C in the backward direction = 3×9.131 − 7.082) = 20.311 units. But this length is also read as (9×3 − 7) = 20 units. It corresponds to the frequency ratio $(\frac{4}{3} \times \frac{4}{3} \times \frac{4}{3} \times \frac{4}{5}) = \frac{256}{135}$.

This shows how notes denoted by certain sruti numbers can have two assigned frequencies. The actual frequency that is assigned to the note depends upon how this note is inter-related in a scale. A note which is obtained from the keynote by making use of the interval of 9 srutis twice or thrice may be denoted by the necessary sruti number with prefix 's'. Similarly a note which is obtained from the keynote by making use of the interval of (−9) srutis (ratio 3/4) two or three times may be denoted by the requisite sruti number with a prefix 'l'. With this modification inter-relation between various notes in a scale becomes known without any ambiguity.

It is, however, desirable that the cases of duplicate frequency values should be minimum. This is possible provided the 'log numbers' of the basic frequency ratios are very closely near to whole numbers. This was fairly achieved by the ancients by correctly choosing the number 'twenty-two' for dividing the octave.

In order to see whether there is any other number which is more suitable for the division of the octave a table was prepared: the first column giving the number of parts into which the octave is supposed to be divided ; the second column giving calculated number of parts (log numbers) corresponding to the basic frequency ratios 3/2, 4/3 and 5/4; the third column giving the whole numbers nearest to the calculated parts corresponding to the basic frequency ratios; the fourth column giving the percentage errors in using the nearest whole numbers ; and the fifth column giving the greatest percentage error (omitting sign). (If the octave is divided into 'n' parts then the number of parts in the ratio $\frac{p}{q}$ is given by

$$\text{No. of parts} = n \frac{\log \frac{p}{q}}{\log 2}.)$$

The division of the octave into intervals must be such that the greatest percentage error should be least. It was seen from the table that the greatest percentage error does not decrease continuously with the increasing number of intervals. It decreases in an oscillatory manner. For example if the octave is divided into 21, 22 and 23 parts then the greatest percentage errors are 3.4, 1.4 and 5.8 respectively. Therefore the purpose of representing the basic frequency intervals by whole numbers is not served merely by dividing the octave into larger number of parts.

The greatest percentage error successively decreases for the following intervals in the octave.

No. of intervals in the octave	Greatest percentage error
12	3.4
19	1.9
22	1.4
31	1.0
34	0.79
53	0.365
65	0.357

Further the division of the octave must be such that the number of intervals should not be too large. If the octave is to be divided into some other number of intervals, then as can be seen, the suitable numbers will be 31, 34, 53 and 65. With these divisions the cases of duplicate frequencies will become less and less but the numbers representing the basic ratios will no more be 'small' numbers.

The number twenty-two satisfies both the required conditions and so is the appropriate number for dividing the octave. There is no other number which is more suitable to replace it.

The author is thankful to the Principal, Nowrosjee Wadia College, Poona, for giving research facilities and to Prof. V. N. Kelkar and Dr. B. C. Deva for their help.

References

1. Alain Danielou, Introduction to the study of musical scales, Fifth part, pages 137–138, The India Society, London 1943.

2. Government of India Patent No. 37672 granted to Shri H. V. Modak. H. V. Modak, Automatic Musical Accompaniment to Vocal Music, Journal of the University of Bombay, March 1948.

3. H. V. Modak, A Method of Testing Musical Tuning and Intonation with "Automatic Musical Instrument". Paper submitted to Indian Science Congress, 1955 Session.

4. Firoze Framjee, Text Book on the Theory and practice of Indian Music, pages 108 to 116, Poona.

Supposed No. of parts in the octave	(Log Numbers) Calculated No. of parts for the frequency ratios			Nearest whole numbers for the ratios			Percentage error * in using nearest whole numbers for the ratios			Greatest percentage error*
	$\frac{3}{2}$	$\frac{4}{3}$	$\frac{5}{4}$	$\frac{3}{2}$	$\frac{4}{3}$	$\frac{5}{4}$	$\frac{3}{2}$	$\frac{4}{3}$	$\frac{5}{4}$	
12	7.0196	4.9804	3.8631	7	5	4	0.28	0.39	3.4	3 4
13	7.6045	5.3955	4.1851	8	5	4	4.9	7.9	4.6	7,9
14	8.1895	5.8105	4.5071	8	6	5	2.4	3.2	9.9	9.9
15	8.7745	6.2255	4,8290	9	6	5	2.5	3.8	3.4	3.8
16	9.3595	6.6405	5,1509	9	7	5	4.0	5.1	3.0	5.1
17	9.944	7.0556	5.4728	10	7	5	0.56	0.79	9.4	9.4
18	10.529	7.471	5.7947	11	7	6	4.3	6.7	3.4	6.7
19	11.114	7.886	6.1166	11	8	6	1.0	1.4	1.9	1.9
20	11.699	8.301	6.4386	12	8	6	2.5	3.8	7.3	7.3
21	12.284	8.716	6 7606	12	9	7	2.4	3.2	3.4	3.4
22	12.869	9.131	7 0824	13	9	7	1.0	1.4	1.2	1.4
23	13.454	9.546	7.4044	13	10	7	3.5	4.5	5.8	5.8
24	14.039	9.961	7.7263	14	10	8	0.28	0.39	3.4	3.4
25	14.624	10.376	8 0482	15	10	8	2.5	3.8	0.60	3.8
26	15.209	10.791	8.3701	15	11	8	1.4	1.9	4.6	4.6
27	15.794	11.206	8.6920	16	11	9	1.3	1.9	3.4	3.4
28	16.379	11.621	9.0141	16	12	9	2.4	3.2	0 16	3.2
29	16.964	12.036	9.3360	17	12	9	0.21	0.30	3.7	3.7

* Omitting sign.

Supposed No. of parts in the octave	(Log Numbers) Calculated No. of parts for the frequency ratios			Nearest whole number for the ratios			Percentage error* in using nearest whole numbers for the ratios			Greatest percentage error*
	$\frac{3}{2}$	$\frac{4}{3}$	$\frac{5}{4}$	$\frac{3}{2}$	$\frac{4}{3}$	$\frac{5}{4}$	$\frac{3}{2}$	$\frac{4}{3}$	$\frac{5}{4}$	
29	16.964	12.036	9.3360	17	12	9	0.21	0.30	3.7	3.7
30	17.549	12.451	9.6579	18	12	10	2.5	3.9	3.4	3.8
31	18.134	12.866	9.9798	18	13	10	0.74	1.0	0.20	1.0
32	18.719	13.281	10.302	19	13	10	1.5	2.2	3.0	3.0
33	19.304	13.696	10.624	19	14	11	1.6	2.2	3.4	3.4
34	19.889	14.111	10.946	20	14	11	0.55	0.79	0.49	0.79
35	20.474	14.526	11.268	20	15	11	2.4	3.2	2.4	3.2
36	21.059	14.941	11.589	21	15	12	0.28	0.39	3.4	3.4
37	21.644	15.356	11.911	22	15	12	1.6	2.4	0.74	2.4
38	22.228	15.772	12.233	22	16	12	1.0	1.4	1.9	1.9
39	22.814	16.814	12.555	23	16	13	0.81	1.2	3.4	3.4
40	23.399	16.601	12.877	23	17	13	1.7	2.3	0.95	2.5
41	23.983	17.017	13.199	24	17	13	0.07	0.10	1.5	1.5
42	24.569	17.431	13.521	25	17	14	1.7	2.5	3.4	3.4
43	25.154	17.846	13.843	25	18	14	0.62	0.86	1.1	1.1

*Omitting sign

Supposed No. of parts in the octave	(Log Numbers) Calculated No. of parts for the frequency ratios			Nearest whole numbers for the ratios			Percentage error * in using nearest whole numbers for the ratios			Greatest percentage error*
	$\frac{3}{2}$	$\frac{4}{3}$	$\frac{5}{4}$	$\frac{3}{2}$	$\frac{4}{3}$	$\frac{5}{4}$	$\frac{3}{2}$	$\frac{4}{3}$	$\frac{5}{4}$	
44	25.738	18.262	14.165	26	18	14	1.0	1.5	1.2	1.5
45	26.323	18.677	14.487	26	19	14	1.2	1.7	3.5	3.5
46	26.908	19.092	14.8C9	27	19	15	0.34	0.48	1.3	1.3
47	27.493	19.507	15.131	27	20	15	1.8	2.5	0.8/	2.5
48	28.078	19.922	15.453	28	20	15	0.28	0.39	3.0	3.0
49	28.663	20.337	15.775	29	20	16	1,2	1.7	1.4	1.7
50	29.248	20.752	16.097	29	21	16	0.86	1.2	0.61	1.2
51	29.833	21.167	16.418	30	21	16	0.56	0.80	2.6	2.6
52	30.418	21.582	16.740	30	22	17	1.4	1,9	1.5	1.9
53	31.003	21.9?7	17.062	31	22	17	0.01	0.014	0.365	0.365
54	31.588	22.412	17.384	32	22	17	1,3	1.9	2.3	2.3
55	32.173	22.827	17.706	32	23	18	0.54	0.75	1.6	1.6
56	32.758	23.242	18.028	33	23	18	0.73	1.1	0.16	1.1
57	33.343	23.675	18.350	33	24	18	1.0	1.4	1.9	1.9

* Omitting sign.

Supposed No. of Parts in the octave	(Log Numbers) Calculated No. of parts for the frequency ratios			Nearest whole numbers for the ratios			Percentage error* in using nearest whole numbers for the ratios			Greatest percentage error*
	$\frac{3}{2}$	$\frac{4}{3}$	$\frac{5}{4}$	$\frac{3}{2}$	$\frac{4}{3}$	$\frac{5}{4}$	$\frac{3}{2}$	$\frac{4}{3}$	$\frac{5}{4}$	
58	33.928	24.072	18.672	34	24	19	0.21	0.3	1.7	1.7
59	34.513	24.487	18.994	35	24	19	1.4	2.0	0.03	2.0
60	35.098	24.902	19.316	35	25	19	0.28	0.39	1.7	1.7
61	35.683	25.317	19.638	36	25	20	0.88	1.3	1.8	1.8
62	36.268	25.732	19.960	36	26	20	0.74	1.0	0.20	1.0
63	36.853	26.147	20.281	37	26	20	0.40	0.57	1.4	1.4
64	37.438	26.562	20.603	37	27	21	1.2	1.7	1.9	1.9
65	38.022	26.978	20.925	38	27	21	0.06	0.08	0.357	0.357
66	38.607	27.393	21.247	39	27	21	1.0	1.5	1.2	1.5
67	39.192	27.808	21.569	39	28	22	0.49	0.69	1.9	1.9
68	39.778	28.222	21.899	40	28	22	0.56	0.79	0.46	0.79
69	40.362	28.638	22.213	40	29	22	0.90	1.2	0.97	1.2
70	40.947	29.053	22.535	41	29	23	0.13	0.18	2.0	2.0

*Omitting sign.

SEPTIMAL FREQUENCY RATIOS AND TWENTY-TWO SRUTI SCALE*

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The customary Indian practice is to divide the octave into 'twenty-two' srutis, for which, however, satisfactory explanation is not found in the earlier literature. This division of the octave into twenty-two parts has been considered arbitrary by many musicologists, who have also written much against it.[1]

In a previous paper[2] the author has given a logical explanation which shows that the number twenty-two is the most suitable number for dividing the octave.

Frequency ratios and corresponding sruti intervals are as follows:

Frequency ratio	Sruti interval
2/1	22
3/2	13
4/3	9
5/4	7

Multiplication or division of relative frequency by a frequency ratio corresponds to increasing or decreasing the sruti number by corresponding sruti interval. This is possible provided the numbers 22, 13, 9 and 7 are proportional to the logarithms of 2/1, 3/2, 4/3 and 5/4 respectively and actually it is very nearly so.

More exactly we get

$$\frac{\log 2}{22} = \frac{\log 3/2}{12.869} = \frac{\log 4/3}{9.131} = \frac{\log 5/4}{7.082}$$

Shruti numbers can therefore be considered as *one* and *two* figure logarithms for convenient representation of frequency ratios. There is, however, no rounding off of the actual frequency ratio. For example a frequency ratio $\frac{9}{8} = (\frac{3}{2} \times \frac{3}{4})$ corresponds to the interval of $4 = (13 - 9)$ srutis. Representation of frequency ratios by small whole numbers (sruti intervals) has become possible because of the appropriate choice of the number twenty-two for the division of the octave. With this number the greatest percentage error in using nearest whole numbers 13, 9 and 7 instead of exact log numbers 12.869, 9.131 and 7.082 is only 1.4.

* Paper presented to Physics section, Indian Science Congress, 1966.

To see whether there is any other number which is more suitable for the division of the octave a table was prepared: the first column giving the number of parts into which the octave is supposed to be divided, the second column giving calculated number of parts on log scale corresponding to the frequency ratios 3/2, 4/3 and 5/4, the third column giving the nearest whole numbers, the fourth column giving the percentage errors in using the nearest whole numbers and the fifth column giving the greatest percentagc error (omitting sign). A table giving final results (columns one and five) is given here for reference.

It is seen from the table that the (greatest) error decreases in an oscillatory manner. Therefore the purpose of representing the frequency intervals by whole numbers is not served merely by dividing the octave into larger number of parts. The number twenty-two is a 'small' number which introduces minimum error.

In arriving at the above result basic frequency ratios 2/1, 3/2 4/3 and 5/4 only have been considered. This is on the assumption that the notes in a musical scale are inter-related by these frequency ratios only. There are, however, references regarding the septimal frequency ratios ($\frac{7}{6}$, $\frac{7}{5}$, $\frac{7}{4}$) in melodies of Sodth Indian Music.[3] According to Helmholtz[4] subminor Seventh 7/4 and subminor Tenth 7/3 produce harmony effect better than or at least equal to that produced by minor Sixth 8/5. But the inversion or transposition of an interval formed with the number 7 leads to intervals worse than itself. Therefore the scale of modern (harmony) music cannot possibly accept tones determined by the number 7.

Whether the septimal ratios are used or not in melodies of South Indian Music at present can be tested by the frequency analysis of the recorded music. It is however worthwhile to see whether the septimal ratios can be fitted on the twenty-two sruti scale. For this purpose, the above mentioned table has been extended to include the frequency ratio 7/6. (7/5, 7/4 etc. are derived from 7/6). Final results are shown in the accompanying table. It is interesting to see that even in this case when 7/6 ratio is included, the minimum error (2.1%) happens to be with number twenty-two, and so it is suitable for the division of the octave. The other suitable numbers as seen from the table are 31 and 50 for which the errors are 1.5% and 1.2% respectively, but these are not 'small' numbers.

Calculated No. of parts for $\frac{7}{6}=4.893$; Nearest whole No.$=5$

$\therefore \frac{7}{6}$ corresponds to Interval of 5 srutis.

Sruti intervals for the septimal ratios are as follows:

Frequency ratio	Sruti Interval
$\frac{7}{6}$	5
$\frac{7}{4} = (\frac{7}{6}\times\frac{3}{2})$	$(5 + 13) = 18$
$\frac{7}{5} = (\frac{7}{6}\times\frac{3}{2}\times\frac{4}{5})$	$(5 + 13 - 9) = 9$
$\frac{8}{7} = (\frac{6}{7}\times\frac{4}{3})$	$(-5+9) = 4$

Supposed No. of parts in the octave	(Greatest) percentage error in using nearest whole numbers instead of exact log numbers for the ratios *		Supposed No. of parts in the octave	(Greatest) percentage error in using nearest whole numbers instead of exact log numbers for the ratios *	
	$\frac{3}{2}, \frac{4}{3}, \frac{5}{4}$	$\frac{3}{2}, \frac{4}{3}, \frac{5}{4}, \frac{7}{6}$		$\frac{3}{2}, \frac{4}{3}, \frac{5}{4}$	$\frac{3}{2}, \frac{4}{3}, \frac{5}{4}, \frac{7}{6}$
12	3.4	11	37	2.4	2.8
23	7.9	7.9	38	1.9	5.6
14	9.9	9.9	39	3.4	3.6
15	3.8	11.2	40	2.5	2.5
16	5.1	11.2	41	1.5	1.5
17	9.4	9.4	42	3.4	3.8
18	6.7	6.7	43	1.1	4.4
19	1.9	5.6	44	1.5	2.0
20	7.3	11.3	45	3.5	3.5
21	3.4	6.6	46	1.3	2.3
22	1.4	2.1	47	2 5	4.5
23	5.8	5.8	48	3 0	3.0
24	3 4	6.8	49	1.7	1.7
25	3.8	8.7	50	1.2	1.2
26	4.6	4.6	51	2.6	3.1
27	3.4	3 4	52	1.9	3.6
28	3.2	3.8	53	.365	1.8
29	3 7	7.5	54	2.3	2.3
30	3.8	4.8	55	1.6	1.9
31	1.0	1 5	55	1.1	3.8
32	3.0	3.0	57	1.9	3.1
33	3.4	4.8	58	1.7	1.7
34	0.79	5.5	59	2.0	2.0
35	3.2	3.2	60	1.7	2.65
36	3.4	3.4	61	1.8	3.1

* Omitting sign.

The author is thankful to the Principal, Nowrosjee Wadia College, Poona for giving research facilities and to Prof. V. N. Kelkar and Dr. B. C. Deva for their help.

References

(1) Alain Danielou, Introduction to the study of Musical Scales, fifth part, pages 137–138. The India Society, London, 1943.

(2) H. V. Modak: Propriety of Dividing an Octave into Twenty-two Srutis. Journal of the Music Academy of Madras. Pages 151–159, Vol. XXXVIII.

(3) C. S. Ayyar, The Grammar of South Indian Music, 1939, pages 66–76.

(4) Helmholtz on the Sensations of Tone, English translation by A. J. Ellis, pages 227–229. Dover Publications, Inc., New York.

Appendix : Specimen Table

Supposed No. of parts in the octave	(Log Numbers) Calculated No. of parts for the frequency ratios				Nearest whole numbers for the ratios				Percentage error* in using nearest whole numbers for the ratios				Greatest percentage error*	
2	$\frac{3}{2}$	$\frac{4}{3}$	$\frac{5}{4}$	$\frac{7}{6}$	$\frac{3}{2}$	$\frac{4}{3}$	$\frac{5}{4}$	$\frac{7}{6}$	$\frac{3}{2}$	$\frac{4}{3}$	$\frac{5}{4}$	$\frac{7}{6}$	without $\frac{7}{6}$	with $\frac{7}{6}$
17	9.9444	7.0556	5.4728	3.781	10	7	5	4	0.56	0.79	9.4	5.5	9.4	9.4
18	10.529	7.471	5.7947	4.003	11	7	6	4	4.3	6.7	3.4	.08	6.7	6.7
19	11.114	7.886	6.1166	4.226	11	8	6	4	1.0	1.4	1.9	5.6	1.9	5.6
20	11.699	8.301	6.4386	4.448	12	8	6	4	2.5	3.8	7.3	11.3	7.3	11.3
21	12.284	8.716	6.7606	4.671	12	9	7	5	2.4	3.2	3.4	6.6	3.4	6.6
22	12.869	9.131	7.0824	4.893	13	9	7	5	1.0	1.4	1.2	2.1	1.4	2.1
23	13.454	9.546	7.4044	5.115	14	10	7	5	3.5	4.5	5.8	2.3	5.8	5.8
24	14.039	9.961	7.7263	5.339	14	10	8	5	0.28	0.39	3.4	6.8	3.4	6.8
25	14.624	10.376	8.0482	5.434	15	10	8	5	2.5	3.8	0.60	8.7	3.8	8.7
26	15.209	10.791	8.3701	5.782	15	11	8	6	1.4	1.9	4.6	3.6	4.6	4.6

* Omitting sign.

BOOK-REVIEWS

PSYCHOACOUSTICS OF MUSIC AND SPEECH. By Dr. B. C. Deva. Published by the Music Academy, Madras 1967. Pp. 306+10 plates. Rs. 15/-.

This publication of the Madras Music Academy has been sponsored by the Sangeet Natak Academi, New Delhi and represents a collection of "the more important papers of the author on the Psychoacoustics of Music and Speech." The author who holds a Doctorate degree in Physics and Music is well fitted to study the acoustics of music. He is versed in both South Indian and North Indian systems, though his leanings are towards the latter. He has been working on this subject for more than fifteen years and has been associated with both teaching and research, having been head of the Department of Applied Physics and Chemistry at the Sir Curson Wadia Institute of Technology and member on the Board of Studies in Music in more than one University.

The author introduces the acoustic aspect of music from the following three view-points :—(i) Sound as a stimulus which includes the mechanism of sound production, propagation and measurement etc., (ii) Sensation of sound, i.e. the mechanism of receiving sound by a living organism — called psysiological acoustics, and (iii) perception of sound as also the motives for creation of music, integration of sounds in music, psychological dimensions of sound and the like — this branch being called Psychological Acoustics. In Acoustics, as in many other branches of scientific study, it has been felt that the merely 'physical' definition of a phenomenon is "unquestionably insufficient". This renewed awareness has now become quite acute, resulting in the fast developing branch of study, Psychoacoustics.

Every organism receives an infinite number of stimuli and and not all these are consciously defined and acted upon. There is a region of what might be termed a "focus of attention" and the rest is rather vague and may be termed "out of focus"—or a halo. The former has been called by William Jones as the

substantive element and the latter the transitive element of perception. Applying these ideas to music, the words, notes, scales, chords etc. would be the substantive elements and are the foci of attention. Every tone has a transitive and a peripheral element which give it the necessary richness. Indian music is full of such transitive elements called *Gamakas*. Experiments were conducted on this *Gamaka* of music by recording the singing of *Ragas* on a tape-recorder; the tapes were then fed to a double-beam cathode-ray oscilloscope to determine the pitch in Cps. *Raga Sankarabharanam* was sung by Kalyanakrishna Bhagavatar and *Raga Bhup* by B. D. Wadikar. One feature that was obvious was the absence of vibrato which is regularly found in Western music. There are two dips at tones which touch *Ga* from *Ma* and *Pa*. The author concludes by saying that the subject merits deeper study.

There is a chapter on *Ragas* and their time, which deals with the traditional view that certain ragas must be sung at certain parts of the day only. Such restrictions are more in vogue in North Indian music than in the South Indian system. The author agrees that this view appears to have some basis. The *Sandhiprakasa ragas* are mostly pentatonic. "The Sandhya is a most crucial time—when consciousness quietens and other forces take over." The music, which should be such that it introduces tension, achieves this by the use of 'dissonant' notes like *Ri* and *Dha* and by the avoiding of resting places. It is suggested that both the factors *Raga-mood* and time-mood may be studied independently and jointly.

In the long chapter on *Raga-rupa*, an attempt is made to evolve a new system of *Raga*-classification. The number of notes in a *Raga* forms the first basis with the Groups numbered from IV to XII depending on the number of notes in a *Raga*. Thus the *Ragas*, *Bhup* and *Deskar* (and some others also) would come under Group V as they have 5 notes each. The total number of mathematically possible *Ragas*, according to this system is given as 1981. The author introduces a fairly recent tool of "Information theory" to find the Entropy H and the relative entropy R of each *Raga* and so classify the *Ragas* into second order patterns. That *Raga* which has a larger R can generate a greater number of

patterns than one which has a lesser R. Transition matrices have also been worked out for *Bhup* and *Deskar*. *Bhup* has more of the unexpected in it and so is capable of giving more patterns of melodic movements than *Deskar*. But this is, perhaps, not the last word on *Raga*-classification and the author suggests treating *Ragas* as a continuous message. In a later paper (not included in this book but appearing in the Journal, Sangeet Natak—2 Apr. 66), the author uses the chi-sqare, entropy and rank correlation methods to study " Forms in Music ".

The last chapter under the heading Music is " Melodic Perception "—in which the author analyses some of the underlying, simple psychoacoustical factors of perception as proximity, similarity, continuity and closure.

The *Sruti* or the Drone forms the subject matter of three chapters running to 70 pages and reflects the vast amount of experimental and computational work done. The Drone provided by *Tambura* or the *Sruti box* functions as the key-note working both as an integrator and as a rest-note. The second of the chapters titled " Tonal Structure of *Tambura* " is a brief and simplified report of the Dissertation thesis of the author for which the title "*Sangeeta Acharya*" was awarded by the Akhila Bharatiya Gandharva Maha Mandal, Bombay. It has been pointed out that in olden days the *murchanas* were in descending order while in modern days the scale is an ascending one; while *Sa* and *Pa* are invariable in modern music, they have not been so earlier. Music, if it is the bursting forth of emotional expressions should perhaps have the note first sung in a high pitch and so would bring in a descending scale. In the modern *Kutcheri*, the sophistication of the artist and the listeners " does not encurage him to express himself so 'explosively' and he departs from a state of tonus gradually." The drone appears to have been recognised as early as 15th or 16th century and so perhaps the artist (and the listeners) need not think of a performance without the drone! With a sound foundation provided by the drone, music tends to become less recitative and more melodic.

Vedic chants, the problem of continuity in Music and Sruti, the vibrato in Indian Music are some of the other chapters.

In a review meant as an introduction to the book, technicalities have been referred to the minimum extent only. Dr. Deva, by his scientific approach and awareness of modern tools of research, has demonstrated convincingly that research of the highest order using latest techniques in Physics, Mathematics and Statistics can be done and should be continued to be done, in the field of music too.

There are five chapters uuder the heading "Speech". Speech-society may be classified into—Universals (characteristics common to all members of a society—a particular language), specialities (characteristics shared by certain groups but not the total—a particular dialect), Alternatives (characteristics akin to the narrow variations due to local, social differences) and Individual peculiarities. It is pointed out in the first chaprer that phoneticians till recently were working only on ideas of discrete units—phonemes. The new theory introduced by Prof. C. R. Sankaran (who has guided and helped the author and has written an introduction to the book)—takes into account not only the discrete units, but continuous phenomena also. Acoustic phenomena (both in Speech and Music) can be considered neither completely continuous nor discontinuous—either choice would involve us in contradictions. These are inherent in our experience and thinking because of limitations of time-space which bring in their wake before-after orders. Both theoretical considerations and experimental observations (e.g. the transition from vowel to consonant in speech and the transition from one tone to another in music) necessitate the conception of inter-phenomena—i.e. a stage of being which cannot be observed within the limitations of time-space. Prof. Sankaran has called this the alpha-phoneme. This is not subject to the usual criteria of empirical investigations, though it could be directly known. What could be experimented with at time-space levels is the alpha-phonoid which is a unit signal in Acoustics as the velocity of light is in general physics. The alpha-phoneme theory addresses itself to the temporal "between" of an "interval" which is an ordering element in that it connects series which in themselves are unconnected.

Experiments conducted to study the Speech melody in the Telugu language and analysis of the results using orthogonal poly-

nomials and regression equations are described in the next chapter, which has a long list of 20 tables giving the data and analysis in full.

The influence of consonants on vowels, voicing of consonants and the psycho-acoustic constancy of the phoneme are discussed under "Phonetic Studies in the Dravidian" (Telugu). The last chapter on "Action as a measure of accents" ends on the note that "a more definite method of solution of the problem must be left to the development of a technique that is neither continuous nor discontinuous." We can certainly look forward to the day when the author would provide such a development.

The painstaking efforts and the wide range of scholarship of the author are evident throughout the book. The long lists of notes and references at the end of each chapter are sure to be of value and assistance to one who wants to pursue the matter further.

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SIKH SACRED MUSIC. Published by Sikh Sacred Music Society, A-209, Defence Colony, New Delhi-3. Rs. 4/- ($1. 20; sh. 8)

The compositions of the Sikh Gurus comprised in the Granth Saheb, like those of the Ālvārs and Nāyanmārs and all the Bhakti-Saints of the North and South are set to music. They were sung to Rāga and Tāla and to the accompaniment of strings. There are several volumes on Sikh history and lives of the Sikh Gurus and translations and expositions on the literary, religious and other significance of the hymns of the Gurus, but there have not been many studies on their music. The publication under notice, however short, will therefore be welcome, as it not only addresses itself primarily to the musical aspect but also reveals the fact that steps have been taken and are also currently being taken to preserve the traditions of this important branch of the sacred music of India. The Sikh Sacred Music Society, New Delhi, is to be congratulated for their work in this direction.

The pioneering work of Ernest Trump who produced a translation of Granth Saheb (1877) and the monumental work in six volumes of M. A. Macauliffe (1909) on Sikh Religion make a few observations on the music of the hymns of the Gurus. The latter book, at the end of the fifth volume, gives in staff notation the thirty-one Rāgas, together with their varieties, to which the hymns were set. The hymns in the Holy Book are arranged by their music, that is, according to the thirty-one Rāgas used for them. Guru Nanak sang his hymns to the music of the *Rabab* played by Mardana, a Muslim who always accompanied him, and from whom a *Gharana* of *Rababis* grew. The practice of singing these hymns to the accompaniment of instruments continued and there has been a continuous tradition upto this day of the music of the Holy Granth. In 1922, one of the traditional singers, *Rāgis* as they are called, Prem Singh, was responsible for the publication of the notation of the thirty-one Rāgas, together with a sample hymn for each, in a work called *Gurmat Ratan Sangeet Bhandar*, included in the *Gurmat Sangeet* by Dr. Vir Singh and others. There have been a few other publications of this kind and in the present publication, the Sikh Sacred Music Society has, in the brief compass of ninety pages, given for the sake of the wider world of those interested in Indian Music and Indian Culture a general account of the music of Granth Saheb.

After a preliminary account of the ten Gurus with special reference to the contribution of each to the Granth Saheb and its music, the book deals with the music of the Gurus, the performance of *Shabad Kīrtan*, (the Kīrtana of the S'abda, i.e. the Sacred Word or hymns of the Holy Book) and the musical instruments used for Sikh devotional singing ; in the concluding section, later developments in the rendering of the hymns and the work of preserving this music are dealt with. In the end are given a chronological table, a glossary of Sikh words and a short bibliography.

To students of the devotional movements and the history of music which was fused with them, there are several interesting data in the Sikh hymns which form part of this twin heritage and which have not been so well-known or appreciated. These data

also confirm the ideas which are common and fundamental to the traditions of this twin heritage of devotion and music in the regional languages all over the country, as the reviewer has shown in his *The Great Integrators—The Saint-Singers of India.*

The Gurus believed and taught by example and precept that singing the praises of the one God was the best way of devotion. Nanak told a Muslim Pir that musical sound originated from God and was holy ; that the best way of worshipping God was to blend the divine word with holy music and that such sacred music was superior to music that was indulged in for entertainment (p. 38). Guru Amardas said that Shabdas, i.e. the hymns sounded pleasing in Rāgas, when the mind was attuned to God. Pointing out the comparative merits of individual meditation and singing of the hymns, Guru Arjan said "Individual recitation of the Word is like water-supply from a well, which can irrigate the field of one person, whereas Kīrtan is like a cloud-burst which turns the crops green in many fields (p. 51).

It was Guru Arjan who established a mode of rendering the hymns in their Rāgas and trained a class of singers (*Rāgis*) in a style which suited the spirit of the hymns. The *Rāgis* were not to indulge in secular music or introduce any new melody ; they should understand the meaning of the hymns ; the rendering is to be sombre, without ornamentation ; catchy *Tappa*-style of music, as also elaborate *ālāpa*, is to be avoided ; steady rhythms are to be used and *meends* may be done judiciously.

The thirty-one Rāgas of the Śabdas are no doubt Rāgas of classical music ; but in their use, the Gurus adopted a flexible style, using many variations in the main Rāga; e.g. in Gauḍī alone, eleven varieties occur in this music. The largest number of hymns (501) are in this Gauḍī, the next ones in order being Āsā (373), Rāmkali (304), Bilāval (201) and Śrī (142). Some of the melodies and tunes are derived from folk-music or customary singing at homes for propitiation etc. Nanak himself is said to have devised the *Majah* from a folk-tune and the *Tukhari* as his own invention. The hymns called *Vārs*, twentytwo in number, are in simpler tunes or *Dhuns* ; the celebrated Vār in Āsā includes verses or ślokas.

There is however one point regarding the music of this *Vār* on which the views of the late Bhai Teja Singh, Principal of the Khalsa College, Amritsar, referred to here may not be acceptable to students of Indian music. On p. 54 of the book, reference is made to his opinion that there were in Vār-recitation traces of the influence of the lyrics and odes of the Greeks who were settled in North-Western India in the 4th century B.C. This seems to be a far cry indeed.

Regarding the instrumental accompaniment of Granth-singing, as already mentioned, Nanak sang to the *Rabab* of Mardana ; Nanak is even credited with having devised a new *Rabab* with silken strings instead of goat-gut. In Guru Angad's court, a two-stringed instrument was used ; Arjan himself played a three-stringed *Sarinda*, which is, however, sometimes mentioned as an invention of Guru Ramdas. Guru Govind Singh introduced a variation of the *Sarinda* with a peacock-body. For rhythm, the *Dholak* was the standard accompaniment, with the jingle sometimes of the *Chimta* (steel rods with brass discs). More recently, two harmoniums came to be used and the present book rightly sets itself against this and it is hoped that through the efforts of societies such as the publishers of this book, the traditional instrumentation will be restored.

The organisation of the holy services when these recitations should be done daily and rules for the congregation are also matters worth noting. First there were recitals at the two *Sandhyās*, sun-rise and sun-set and then three were added and still later the practice of continuous singing, comparable to what we call here *Akhanda-bhajana*, developed. The congregation is referred to as *Sat-sangat*. According to a code laid down by Guru Govind Singh, a member of the *Sat-sangat*, if he was inattentive or if he engaged himself in conversation had to pay a fine of Rs. 1.25 ; applause was discounted but just as we raise here at the end of a piece of *Bhajana* the divine formula called *Puṇḍarīkam*, the Sikh congregation could say in high pitch at the end of a piece of recital "*Sat Sri Akal*" (Timeless God is True). Accomplished *Kīrtan-kārs* would mix in reciting one Śabda, portions of other Śabdas having similar or related ideas.

There developed also, comparable to our Harikatha, a full interpretative discourse based on the hymns.

In the last chapter there is an interesting account of different groups and individuals who made organised efforts to preserve and promote the singing of the Granth Sahab and of renowned *Rāgis* and the succession of gifted reciters, in Punjab, Sindh and Delhi.

The book closes with a quotation from Guru Arjan who called *Kirtan* a "priceless jewel", and we join the authors and publishers of the book in their appeal for maintaining vigilantly the luminosity of this gem from the land of the five rivers in the diadem of *Bhakti-sangit* on the forehead of Bharat Mata, set with the multi-coloured gems from the different *Śabdas* of Her holy land.

V. Raghavan

IN MEMORIAM

Indian Music and particularly Carnatic Music and the Music Academy, Madras have sustained a serious loss in the unfortunate demise of several outstanding senior musicians during 1967.

The death of Sangita Kalanidhi Ariyakkudi Ramanuja Iyengar deprived the field of Carnatic music of a leader of the profession who had dominated the field for half a century and more, during which he not only delighted vast audiences with concerts of steady, unfailing appeal, but also set the norm and form of the concert as suited to the times and provided inspiration to the performers of the generation.

The late Sangita Kalanidhi T. Chowdiah was a brilliant accompanist on the violin and Sangita Kalanidhi Karur Chinnaswami Iyer was a doyen of South Indian violinists.

These musicians were Presidents of the Academy's Annual Conferences.

Smt. T. Jayammal, grand-daughter of Veenai Dhanammal and mother of Smt. T. Balasarasvati, was the bearer of a very rich tradition and chaste style of Carnatic music and a storehouse of rare Kritis, Padas and Javalis. Till her demise, she was teaching in the Teachers' College of Music of the Music Academy, Madras.

Vidvan Madras Balakrishna Iyer was, like Karur Chinnaswami Iyer, a doyen of violinists and had in his days accompanied most of the masters of the past generation.

Brahmasri Annaswami Bhagavatar was the foremost performer of Harikatha after the generation of Panchapakesa Bhagavatar, Srirangachariar, Chidambara Bhagavatar etc. His expositions were marked by taste, wit and choice music.

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Pt. Omkar Nath Thakur was not only a distinguished Hindustani vocalist but a scholar who contributed to the interpretation of the history and theory of Indian music and was also

responsible for organising the music studies at Banaras Hindu University. He had taken part in the Conferences of the Music Academy, Madras.

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Along with several other bodies, the Music Academy, Madras also bemoans the death of Dr. C. P. Ramaswami Aiyar who was one of the great sons of India and had made outstanding contribution not only to public life and administration but also to academic, educational and cultural development in the country. It was he who inaugurated the Music Academy, Madras as a permanent organisation in 1927. He was not only continuously interested in the welfare of the Academy but as Dewan of Travancore, with his dynamic policy coupled with the patronage of Their Highnesses of Travancore, he was responsible for the propagation of the compositions of Maharaja Svati Tirunal, the setting up of the Svati Tirunal Academy and the help and patronage that all the leading Carnatic musicians received from Travancore.

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The Academy places on record its deep sense of sorrow at the demise of Sri E. Krishna Iyer, B.A., B.L., who was one of the Founder-Secretaries of the Music Academy, Madras. Sri Krishna Iyer was a Congressman and was well known for his renderings of the national songs of Subrahmanya Bharati at Congress public meetings. He was also an enthusiastic actor and participated in the Sanskrit dramas of the Suguna Vilas Sabha, Madras. His learning Bharata Natya for the role of Malavika in Kalidasa's Malavikagnimitra was the beginning of a lifelong interest in that art on which he spoke and wrote widely. He was connected with several organisations in these fields and it was fitting that he was appointed the first Secretary, when the Madras State set up its own official Sangita Nataka Sangham. One of his earliest books in the field of music was "Persons and Personalities in the field of Music and Dance"; later he brought out also a volume of his lectures on dance.

V. R.